**INTERNATIONAL RELATIONS**

**To revive an old friendship**

* first-ever joint Russian military exercises with Pakistan, that were initially to be held in the sensitive Gilgit-Baltistan area this week, would be shifted with due respect to Indian sensitivities.

Is there a shift in Russian geostrategy and linkage with China that is impacting Moscow’s relations with India? Have India’s own foreign policy shifts and new relations set off a reaction in Russia?

* Under President Vladimir Putin, Russia has shown assertiveness in international affairs. Demonised by the West, Russia has become a strategic partner of China and they have significant convergence of interests.
* India as an emerging power has developed a strategic partnership with the U.S.There are real and perceived shifts in Indian armament policies where Russia dominated for years. India has opened up to the U.S., France, Israel, all of whom are gradually edging out the Russians in some sectors. Russia-India trade has not grown to great heights despite the encouragement of both states. Yet India has been supportive of Russian positions and has a careful and calibrated response to all Russian actions — in Chechnya, Syria, Ukraine and elsewhere, India has supported Russia.
* The Russians, on their part, have dutifully backed the Indian position on Kashmir; they share Indian concerns on terrorism; they continue with deep collaborations, providing sensitive technologies, military equipment, nuclear power engines and much more to India. They have a partnership in energy. Yet a Russia dependent on arms and energy exports is constantly looking for new markets and Pakistan is a potential one. The planned exercises were an extension of this search.  
    
  MULTIPLE POWERS AND INTERDEPENDENCY:
* The reality is that the world situation is one of multipolarity and consequent interdependency, contradictions, compromises and pressures.
* Countries across the spectrum are building multiple alliances. There is scope for both linkages and dependency. China has got its yuan accepted as world currency by the International Monetary Fund and the New York branch of Bank of China has been designated as the clearing house for the Chinese official currency, the renminbi. China is leveraging its economy and relationships to build a hegemony (G-2) with the U.S. where both can share international financial domination.
* Russia is well aware of this, and has its own concerns about the Chinese dominating Russian markets, exploiting Russian resources, and not backing Russian security concerns.
* China is enticing countries, including Russia, with its One Belt, One Road plan that will develop huge new linkages and develop trade routes. Pakistan is a satellite state for China. Russia has concerns about Central Asia vis-à-vis China and Pakistan.
* In these circumstances, India has to rebuild on its strengths and common concerns with the Russians. They have to revitalise their earlier agreement on sharing intelligence for a joint strategy on terrorism. If India is concerned with state-sponsored terrorism from Pakistan, Russia is concerned with the backing that states are directly or indirectly giving to terror groups in West Asia and Central Asia. India will have to be more forthright in condemning states that on the pretext of regime change or local geopolitics are allowing the growth of terror groups in West Asia.

**Balancing new and old allies**

Russia and India have common positions and concerns in Afghanistan.  
India has its own military exercises with the U.S. and has signed logistics agreements which can eventually give the U.S. access to Indian naval bases. Is India willing to do the same with Russia? Given the growing U.S.-Russia hostility, has India reassured Russia that this access will not jeopardise Russian interests?

AREAS OF COLLABORATION:

* India needs to deepen its scientific and technological relations with Russia since a base for this already exists.
* The Russia-India investments in the oil and gas sector and exports to third countries need to be energised.
* Joint manufacturing needs to be planned.
* A continuous engagement and follow-up plan need to be made.
* India and Russia are engaged in several multilateral efforts that are greatly favoured by Russia such as the BRICS and the Shanghai Cooperation Organisation. Russia had proposed a Russia-India-China (RIC) forum. This has not moved ahead like the BRICS has. Our argument should be, if China can have compromises and contradictions with the U.S., then why not with India? India can use some creative means to build an RIC alliance.  
  The U.S. will always have a dual approach to India and Pakistan, because it needs both. Russia, on the other hand, will not. But India has to actively ensure that and not take this strategic partnership for granted.

**Leveraging multilateralism**

* India’s domestic politics has to move towards inclusive democracy, non-militarism, rights and the rule of law. This will give it an edge in the international system. Indian foreign policy should focus on its strengths of working with the global South, opposing militarist interventions, building norms and depending on multilateralism. India cannot be in denial of its history even as it moves forward.
* As far as Russia is concerned, it might appear that there is some strategic shift. But Russia has been pushed into that position. In reality, it knows that India is still its most reliable ally. It has no conflict of interest or anxiety about India as it does about others.
* India was instrumental in the construction of a multipolar international system. This system has benefitted India and Russia, not to speak of others like China. To retain this, India and Russia need to be active strategic and economic allies

**Shooting the Indus Waters Treaty won’t solve India’s terror problem**

Even if India started on a programme to hold back the Indus waters, the dams needed to do so would take decades to build.

Indus Waters Treaty — the 1960 agreement that governs how India and Pakistan share the five rivers that flow west through the Punjab.

Possibility of abrogating the treaty

* Legally, abrogating the treaty isn’t workable; strategically, it will demand massive investments for uncertain dividends. Worst of all, it may actually make India’s terror problems worse, not better. From the outset, control of the Indus waters have played a big role in shaping Pakistan’s efforts to seize Kashmir.
* Indian hawks believe disrupting water flows will signal New Delhi’s willingness to impose costs for Pakistan’s use of terror. India, on August 19, 2008, is alleged to have cut the flow of water to Pakistan by 20,000 cubic feet per second, to fill up the Baghliar dam’s reservoir — searing fields across Pakistani Punjab, and provoking Hafiz Saeed’s pre-26/11 speech.

Feasibility:

* Even if India started on a programme to hold back the Indus waters, the dams needed to do so would take decades to build. However, India could use its existing storage to disrupt key parts of the agricultural cycle, or impose urban hardship during the leanest summer months. Abrogating the treaty, the hawks’ argument goes, would signal willingness to do so — and thus prompt rethinking in Pakistan’s strategic establishment.
* Perhaps this calculation is true — but the fact is events of 2008 enabled the Lashkar to increase its reach and influence in swathes of Punjab. Pakistan’s first response is likely to be step up the heat on India, by escalating its terror offensive, in the hope India will back off. Indian water disruption, thus, would hurt Pakistani agriculture, but its other impact might well be to strengthen jihadist groups.
* Finally, it it would be hard to recruit international support against such terrorism: violence carried out retaliate against deliberately-inflicted thirst, for obvious reasons, would carry less moral opprobrium than violence driven by religion.
* The end result: India would face heightened terrorism, not less, as a result of abrogating the Treaty. Legally, scrapping the Indus Waters Treaty would also leave India on weak ground
* .there is no clause outlining circumstances under which either India or Pakistan may unilaterally denounce — legalese for exit —the treaty. Instead, the treaty says only that its provisions may only be modified or replaced by “a duly ratified treaty concluded for that purpose between the two Governments”.
* In 1969, the Vienna Convention on the Law of Treaties laid out circumstances in which treaties which do not contain a denunciation clause may be repudiated. Article 56 states that there are just two such get-out-of-jail routes: if it “is established that the parties intended to admit the possibility of denunciation or withdrawal”, or a “right of denunciation or withdrawal may be implied by the nature of the treaty”
* Department noted, in a legal advisory, that treaties could only be abrogated with the consent of both parties if there was no provision to do so in the agreement.
* India could, of course, act as other big powers have done, and simply ignore the law. This would, however, come at significant costs.
* the international legal system is “rounded on a fundamental principle: pacta sunt servanda — treaties must be obeyed”. That is the principle India has invoked to argue that Pakistan’s efforts to internationalise the Kashmir dispute are illegal, since it signed the Shimla Agreement, committing it to resolve disputes bilaterally. India used the same principle to insist on the sanctity of the Line of Control in 1999.
* For India to act unilaterally on the Indus, thus, would weaken its own case on the big issue — Kashmir.  
  Like so many hawkish memes, Indus Treaty abrogation has been marketed as grand strategy. Held up to the light of day, though, it isn’t hard to see it for what it is: a plan that belongs to the dusty shelf reserved for awful ideas.

**In fact: Why politics in trade is a bad deal**

PM Modi has called a meeting on MFN status today. Business has always been hostage to India-Pak politics.

After Uri, India On The Offensive Against Pakistan: Complete Analysis

* Not only does such a step seem hasty and unbecoming of a G20 country, it also doesn’t make much economic sense.
* Pakistani imports are a minuscule 0.1% ($ 441 million in 2015-16) of India’s total imports. India’s exports to Pakistan, on the other hand, averaged $ 2 billion a year over the last three years (a little less than 1% of its total exports). In other words, India enjoys a favourable trade balance with Pakistan, and has more to lose if trade is indeed blocked in the coming days, and less to gain by withdrawing MFN status.
* India is also the world’s fastest growing economy with ambitions of greater heft at the global high table — and for it to go against commitments made to the World Trade Organisation (WTO) makes for bad optics.
* Article 1 of the General Agreement on Tariffs and Trade (GATT) that governs trade in goods requires every member to offer MFN status to all other members — contrary to what the expression “most favoured” conveys, MFN status actually requires a member to not discriminate among other members, and to treat all other WTO members equally in terms of tariff imposed on goods.
* The fact is that India-Pakistan bilateral trade has never really blossomed over the past many decades. From what businessmen on both sides estimate the value of the informal trade on the circuitous Mumbai-Dubai-Karachi route — between $ 500 million and $ 5 billion — it would seem bilateral trade could potentially be 10 times its current value, or upwards of $ 20 billion.
* To achieve this, of course, a lot more must be done — crucially, a dramatic improvement in all-round connectivity. More land routes, more flights to carry cargo, and better Customs harmonisation will help significantly.
* Businessmen on both sides benefit if multiple direct trade routes are established and trade ties normalise.
* More business enlarges the scope of people-to-people contact and creates jobs on both sides, bringing peace dividends to the political process.
* Pakistan committed itself to operationalising MFN status to India in 2012 by opening up trade, barring a short ‘negative list’ of items that India would not be allowed to export. In fact, it was the overwhelming sentiment of businesses on both sides that seemed to have pushed the two governments into clinching a deal.
* Notwithstanding the fact that India still awaits the MFN status, Islamabad’s shift to a negative list of items from a positive list, which too will be phased out over time, is remarkable in itself. India also extended preferential tariff to a large number of items of export interest to Pakistan.
* Unless we delink it from politics, we cannot expect any dramatic changes or improvements. Trade can be that balm that will cement relations between the two countries.

**The die is cast**surgical strike along the LoC: This was a limited strike to pre-empt terrorists from entering India. India acted within its rights. The target was terrorists, not Pakistan’s army or territory. It is for now envisaged, officially, as a limited operation.

* The diplomatic circumstances around the operation have used this particular conjunction in global politics, and India’s built-up diplomatic capital well.
* The operation, by its public embrace, becomes the declaration of a policy. Its immediate psychological effect has been to boost confidence in our capabilities.
* It will also, therefore, change expectations, and potentially, the assessment of future options. It enhances Prime Minister Narendra Modi’s standing. It gives him unprecedented political capital, both for his foreign and domestic agenda.
* In strategic terms, we are, whatever the government might stay, still in an ambiguous zone. We demonstrated that we will not succumb to nuclear blackmail; that the threshold before things go out of hand can be raised.
* A “shallow” strike across the LoC is, at best, tinkering with strategic restraint. It is not abandoning it. It is not a form of action that either significantly degrades Pakistan’s capabilities, or compels it to change posture.
* But the main mechanisms to look out for are political. The operation puts the Pakistani Army in a bind. The potentially most powerful effect of the operation may be to put some stress on the relationship between the military and non-state actors in Pakistan. Presumably, the non-state actors will demand greater protection, and hence increase the potential cost of using them.The Pakistan Army cannot be seen to be abandoning its non-state assets and proxies.
* The second thing it could lead to in the short run is change of modus operandi: Instead of cross-border infiltration aimed at Kashmir and the border, there is more targeting of other soft targets. We will not see the effects immediately.
* if the Indian strikes are seen as humiliating, it is bound to have two effects. On the one hand, it will have repercussions on the institutional politics inside Pakistan. It could dent the authority of the current military leadership. On the other hand, the fuel that powers Pakistani elites’ identity is humiliation.
* The public triumphalism about this operation in India is not just cathartic, as if to say we are no longer passive victims. While the government may want a calibrated strategic escalation, the psychological escalation is now out of control.
* In India this psychological recompense is also needed for the fact that we have, for the moment, lost Kashmir. More than 80 days of curfew is a deep moral loss, no matter what we do to Pakistan. This genie will not be put back in easily.
* There is widespread exasperation with Pakistan. There is also a leadership vacuum in global politics: From Syria to Afghanistan, the US is disengaged or stuck. China’s overreach and ideological imperatives make it difficult for it to be an effective international actor in diplomatic terms.
* This vacuum has given India some breathing space. But this space has, paradoxically, been a consequence of India’s relative restraint. It would be foolish to assume unequivocal support for India if hostilities escalate. The international community may be exasperated with Pakistan. But in a global leadership vacuum, there will also be wariness of action that challenges the authority of the Pakistani military beyond a point.  
  India and Pakistan, regimes have now tied the mast of their popular legitimacy to taking strong action against the other. That is not a reassuring thought.

**Breaking out of the box**PM Modi’s test begins now. He must retain control over escalation, ensure cross-border attacks become a regular response to terror strikes from across LoC, sustain pressure on Rawalpindi’s vulnerabilities.With strikes on terror launch pads across the Line of Control in Kashmir, Prime Minister Narendra Modi has won much praise at home and drawn little flak from abroad. The carefully mounted manoeuvre has helped deal with the domestic imperative for visible action against Pakistan, following the killing of 18 Indian soldiers at Uri last month. As a tactical response, it was proportional to the attack on Uri. It also had a strategic dimension — demonstrating Delhi’s political will to face up to the risks of escalating the confrontation with the Pakistan army, headquartered in Rawalpindi.

But the PM’s real test begins now, as a more complex phase in the long-standing conflict between India and Pakistan unfolds. After discarding India’s “do nothing” strategy, Modi must now retain strong control over the inevitable escalation that will unfold, ensure that cross-border military attacks become a regular response to terror attacks from across the LoC, and sustain relentless pressure on Rawalpindi’s political vulnerabilities.  
India has occasionally sought to escalate the confrontation vertically, as it did during 2001-2002, following the attack on Parliament. India’s full military mobilisation put pressure on the United States to compel Pakistan’s then chief of army staff, General Pervez Musharraf, to formally commit Rawalpindi to end support for anti-India terror groups. The confrontation did lead to a period of reduced cross-border violence and a productive moment in the peace process. A ceasefire along the frontiers of India and Pakistan held for a while after it was unveiled at the end of 2003. There were purposeful negotiations on Kashmir, and an expansion of trade and popular contacts.  
That period came to an end in November 2008 with the terror attacks on Mumbai. Amidst the resurgence of cross-border violence, Delhi struggled to come up with a strategy to stop the Pakistan army from organising these attacks or nurturing groups hostile to India. Modi has now taken the first step to break out of that box. To be sure, this is not the first time that the Indian army has conducted a cross-border raid across the LoC. Such tactical raids occur quite often. What is different this time, however, is the timing and context. It comes at a moment when PM Modi has taken a variety of diplomatic and political moves against Pakistan. If he was bold enough to make unconventional peace moves — like showing up in Lahore on Pakistan Prime Minister Nawaz Sharif’s birthday last December — he has been willing to take a fresh look at the risks of escalating the confrontation with Pakistan.  
The Pakistan army, however, is not about to end its support to cross-border terrorism in India, especially in Kashmir. Not so fast. Despite its immediate denial of the surgical strikes, the Pakistan army must be expected to respond. While the civilians in Islamabad will make a lot of noise in the coming days, the ball is really in the court of Pakistan army chief, General Raheel Sharif.  
Like his predecessors, General Sharif has built a halo around himself. There has been much talk about him being promoted as field marshal — for launching a war against the TTP in Pakistan. Having created a larger than life image for himself, General Sharif can’t but be seen as acting. He could order new terror attacks on Indian targets, civilian and military, in India and beyond. He could intensify the political destabilisation of Kashmir and escalate the confrontation on the Line of Control and the international border.  
Modi, then, has his task cut out. He will need to respond effectively on the military side while retaining full control over the escalation. In devising and presenting the cross-border raids this week, Modi has found the right approach to escalation control. This challenge will become harder in the coming days. While he strives for strong control over the pace, direction and scope of the confrontation with Pakistan, he must institutionalise proportional military responses to cross-border terror attacks in Kashmir. The Indian army’s crossing the LoC to attack terror targets has rightly been viewed as a big step forward. It must also become a routine affair. Every time Pakistan-backed terrorists violate the sanctity of the LoC, the Indian security forces must do the same.  
Modi’s difficulty on escalation control is mitigated by two important factors. One is the international dynamic. The past military crises between India and Pakistan have seen quick international involvement to defuse tensions. Pakistan had always calculated that escalation will bring the US to intervene and push for a settlement of the Kashmir dispute. But the Kargil War and Operation Parakram under the NDA governments showed that Delhi could indeed redirect that international pressure onto Pakistan, for example, in compelling Rawalpindi to back off and return to status quo ante. Modi could do even better.  
Delhi’s preemptive cross-LoC counter terror attacks have been complemented by a proactive diplomacy that has sought to win new friends for India as well as weaken potential international support for Pakistan as the current crisis unfolds. Modi has the political confidence as well as international credibility to play the global concerns to India’s advantage. Modi’s new level of comfort with the US has been matched by the surprising mobilisation of two key South Asian states — Afghanistan and Bangladesh — on India’s side.  
Even more important, Modi has a rare opportunity to exercise some influence over Pakistan’s current internal dynamic. Any rise in tension with India would naturally strengthen the Pakistan army’s domestic standing. At least in the initial phase. But if the army is not seen as responding effectively to Indian moves, General Sharif may find himself in a spot of bother. The civilian leadership in Islamabad might not be entirely displeased to see General Sharif come down a peg or two. It has long been assumed that Delhi can’t play Pakistan’s domestic politics. With enough strategic finesse, Modi could well challenge that conventional wisdom.

**Raja Mandala: SAARC minus one**

* As SAARC developed new proposals and agreements in favour of preferential trade, free trade, road and rail connectivity and cross-border energy projects, it became clear that Pakistan was the camel that slowed down the pace of the South Asian caravan
* More accurately, it was the Pakistan Army headquartered in Rawalpindi that exercised the veto.
* Rawalpindi’s problem was with the idea of economic integration with India.
* The BBIN framework was seen by many as heralding the era of ‘SAARC Minus One’ and hostile to Pakistan. The BBIN, however, was very much part of the SAARC framework. The SAARC charter allows two or more countries of the forum to embark on what is called ‘sub-regional cooperation’. It was a policy instrument that was long available to policymakers in Delhi but remained unutilised. Delhi could also complement its sub-regional initiative with trans-regional outreach.

If the Look East Policy aimed to integrate India with Asia, Delhi also helped create a regional forum called the BIMSTEC (Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation). Although it dates back to 1997, the forum that brings five South Asian countries (Bangladesh, Bhutan, India, Nepal and Sri Lanka) together with two south east Asian countries (Burma and Thailand) has remained dormant.

**Aircraft with Indian airborne warning system set for induction**

The DRDO has fitted its own airborne early warning and control system (AEW & CS) on a modified Embraer ERJ 145 aircraft imported from Brazil. With this, the first of the two small surveillance aircraft carrying the first Indian airborne early warning system is slated to be inducted into the Air Force in about two months.

About airborne early warning and control system (AEW & CS):

The AEW&C system is developed to serve the Indian Air Force in detection and tracking, identification and classification of threats, guidance and interception control, display of air situation picture and multisensor data integration.

* It is developed by DRDO in collaboration with CAB(Cantre for Airborne Systems) that provides an airborne surveillance system.
* The system enables the armed forces to communicate with fighter jets and other AEW&C assets, while it also allows for Search and Rescue (SAR) operations, mission planning as well as record and replay for post mission analysis.
* It also allows for Search and Rescue Operations,mission planning as well as record and replay for post mission analysis.

**Paper 2 Topic: Bilateral, regional and global groupings and agreements involving India and/or affecting India’s interests.  
  
India to push for funds at climate talks**At the upcoming climate talks in Morocco in November, India is planning to stress most on trying to operationalise the $100 billion corpus — called the Green Climate Fund — committed by developed countries. Only a fraction of it has been pledged so far.  
  
India would push for developed countries to make good on their prior commitments on finance and technology. So far, India has received only $2 million of the $10 million committed this year.  
India is stressing on the issue as these funds will help nations work on fulfilling their Intended Nationally Determined Contributions (INDC) which aim to reduce carbon emissions through a host of solutions.  
As part of its INDC plans, India had promised to bring down its emissions intensity, or emissions per unit of the GDP, by at least 33% by the year 2030 as compared to 2005 levels.  
  
Green Climate Fund (GCF):  
  
The Green Climate Fund (GCF) is a fund within the framework of the UNFCCC founded as a mechanism to redistribute money from the developed to the developing world, in order to assist the developing countries in adaptation and mitigation practices to counter climate change.

Why it was founded?  
  
It was founded as a mechanism to redistribute money from the developed to the developing world, in order to assist the developing countries in adaptation and mitigation practices to counter climate change.  
  
It was also founded to make a significant and ambitious contribution to the global efforts towards attaining the goals set by the international community to combat climate change.  
  
How it helps?  
  
The Green Climate Fund will support projects, programmes, policies and other activities in developing country Parties using thematic funding windows.  
It is intended to be the centrepiece of efforts to raise Climate Finance of $100 billion a year by 2020.  
The Fund will promote the paradigm shift towards low-emission and climate-resilient development pathways by providing support to developing countries to limit or reduce their greenhouse gas emissions and to adapt to the impacts of climate change, taking into account the needs of those developing countries particularly vulnerable to the adverse effects of climate change.  
The Fund will strive to maximize the impact of its funding for adaptation and mitigation, and seek a balance between the two, while promoting environmental, social, economic and development co-benefits and taking a gender-sensitive approach.  
  
  
Who will govern the Fund?  
  
The Fund is governed and supervised by a Board that will have full responsibility for funding decisions and that receives the guidance of the COP.  
The Fund is accountable to, and functions under the guidance of, the COP.  
  
**Insights into Editorial: China’s One-Road-One Belt Initiative: A New Model of Global Governance**  
With its ‘One Belt One Road’ initiative, China is now seeking to establish its identity as a world class power. The One-Road-One-Belt (OROB) initiative for connectivity, with clear strategic advantages for China, contrasts sharply with existing treaty-based integration concepts where the geographical scope, partner countries, strategy, principles and rules are clearly defined at the outset. 34 countries have already signed cooperation agreements with China.  
  
What is One Belt, One Road initiative?  
  
The One Belt One Road initiative is the centrepiece of China’s foreign policy and domestic economic strategy. It aims to rejuvenate ancient trade routes–Silk Routes–which will open up markets within and beyond the region.  
  
Through this initiative, China’s plan is to construct roads, railways, ports, and other infrastructure across Asia and beyond to bind its economy more tightly to the rest of the world.  
  
What’s good about this initiative?  
  
South Asia is the least integrated region in the world, and that is not in line with global trends. The new initiative aims to integrate the region.  
The Initiative, seen more as a policy indicator than a set of projects, will link three continents – Asia, Europe and Africa.  
China has cash and deposits in Renminbi equivalent to USD 21 trillion, or two times its GDP, and expects that the massive overseas investment in the OROB will speed-up the internationalization of the Renminbi.  
It is also seen as a strategic response to the military ‘re-balancing’ of the United States to Asia.  
  
There are several structural challenges that confront the Chinese OBOR initiative:  
  
First, the perception, process and implementation to date do not inspire trust in OBOR as a participatory and collaborative venture. The unilateral ideation and declaration — and the simultaneous lack of transparency — further weaken any sincerity towards an Asian entity and economic unity. However, China says that it is committed to pursue wide-ranging consultations with the 60-plus nations on this issue.  
It is widely accepted that through this initiative China is projecting its military and political presence along OBOR. China is also willing to underwrite security through a collaborative framework. Hence, few countries including India have wholeheartedly not welcomed this initiative.  
Another challenge deals with the success of the ‘whole’ scheme, given that the Chinese vision document lays out five layers of connectivity: policy, physical, economic, financial and human. While no developing country will turn away infrastructure development opportunities financed by the Chinese, they may not necessarily welcome a rules regime built on a Chinese ethos.  
This belt runs through Pakistan-occupied Kashmir. Hence, a formal nod to the project will serve as a de-facto legitimisation to Pakistan’s rights on Pakistan-occupied Kashmir and Gilgit-Baltistan under the China-Pakistan Economic Corridor (CPEC) that is closely related to OBOR.  
  
China is also aware that it is investing in a risky environment and that the OROB initiative may not be commercially rewarding. China has a three-fold solution to these problems:  
  
First, it invites governments to organize summits to identify issues and seek common understandings, cooperation memorandum and people-to–people contact as the basis for regional cooperation.  
Second, China is also organizing technical workshops of the concerned countries to facilitate investments and is partnering with multilateral institutions in this effort to give greater legitimacy. It is entering into areas the United Nations and bilaterals have ignored but have been considered important by developing countries. For example, a workshop to harmonize intellectual property rights legislation was organized in Beijing in July, jointly with the World Intellectual Property Organization.  
Third, China is using money to resolve security issues, like paying Pakistan for an army division dedicated to the protection of Gwadar and is actively considering setting up a private security agency, borrowing ideas from something the United States has done for decades, but paid for by the companies rather than the government.  
India and OBOR:  
  
With China now a USD 10 trillion economy, compared to India’s economy of USD two trillion, India is at a defining movement on how the Asian Century will be shaped. The strategic question is whether Asia will have two poles, as it has had throughout history, or will India remain at Asia’s periphery as a regional power?  
  
Chinese political expansion and economic ambitions, packaged as OBOR, are two sides of the same coin. It is being seen as both a threat and an opportunity. To be firm while responding to one facet, while making use of the opportunities that become available from the other, will largely depend on the institutional agency and strategic imagination India is able to bring to the table.  
China is keen to have India on board and both recognize that working together is necessary for achieving the ‘Asian Century’. India should seek to ‘redefine’ OROB to add a strong component for a ‘Digital Asia’, as that is where our comparative advantage lies, and for Asian connectivity to have two nodes, in China and in India, as has been the case throughout history.

Way ahead:  
  
China is determined to push the OBOR initiative as it sees connectivity rather than global rules leading to increased trade, and continuing growth. China plans to have free-trade agreements with 65 countries in the six ‘economic belts’ of the OBOR, accounting for two-thirds of the world population and 30% of GDP and consumption. The areas of cooperation include fibre optics, telecommunication, trade facilitation, monetary policy coordination and arrangements to manage financial risk. Bringing together policy areas that are currently split between the United Nations and Bretton Woods Institutions is a long-standing demand of developing countries.  
  
The OROB initiative has moved beyond the discussion stage to being politically and economically accepted widely. In April 2016, an agreement was signed with the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), treating implementation of the OROB initiative as promoting regional cooperation. This is in part an answer to India’s concerns that connectivity should be built through consultative processes and not unilateral decisions.  
Conclusion:  
It is fair to say that China, in deploying the OBOR initiative, has demonstrated a level of ambition and imagination which is mostly absent in India’s national discourse. India has so far been suspicious of the strategic implications of this initiative. If India sheds its inhibitions and participates actively in its implementation, it stands to gain substantially in terms of trade. Arguably, OBOR offers India another political opportunity. There seems to be a degree of Chinese eagerness to solicit Indian partnership. OBOR could potentially allow India a new track to its own attempt to integrate South Asia. However, India should act strategically on issues such as OBOR which will have a significant impact on India’s vital interests.

**Regional Anti-Dumping Workshop**  
Regional Anti-Dumping Workshop for Asian Investigating Authorities was recently held in Delhi.  
The Workshop organised by the World Trade Organisation and the Centre for WTO Studies, Indian Institute of Foreign Trade brings together 37 senior officials from 18 investigating authority systems.  
Senior experts from developing countries in the Asian region, along with select developed countries like Australia, Canada, the EU, Japan and the United States participated in the workshop.  
The Workshop aims to assist Asian developing WTO Members’ investigating authorities to further enhance their technical capacity to conduct anti-dumping investigations in a fair and efficient manner, in conformity with WTO rules.

**Clinching the N-deal**

India has completed agreements for civil nuclear cooperation with 11 countries so far, including the U.S., Russia, Australia, Canada and South Korea, but the upcoming agreement with Japan could be the most significant. Japan is the only country to have been the victim of a nuclear attack, and its decision to sign an agreement with India, a country that has not signed the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), would be a first. Reservations in Japan against nuclear energy have hardened after the Fukushima accident. Tokyo’s support to the deal so far is therefore an indication of the importance it accords to relations with India. For India, the civil nuclear agreement with Japan is especially important for the message of trust it would convey to Nuclear Suppliers Group members in a year the country hopes to have its admission accepted. Japan’s support at the NSG has been particularly marked. In fact, India and Japan share many multilateral platforms, including membership of the G-4 group that is knocking at the UN Security Council’s door for reform. Beyond symbolic reasons, Japanese nuclear energy technology and safety parameters are widely considered to be cutting-edge, and many critical parts needed for Indian reactors are made by Japanese manufacturers. These will not be available to India until the agreement is done. Although India has even considered trying to manufacture them locally, there won’t be alternatives to Japan for several years. Even the U.S. civil nuclear deal, that is yet to be actualised, is contingent on the deal with Japan, given that the current discussions for six reactors in Andhra Pradesh are with Westinghouse, which is owned by the Japanese company Toshiba.  
It may appear baffling why the deal has taken so long to negotiate. The main sticking point has been India’s refusal to sign the NPT, as it considers the treaty unfair to the developing world. This is why New Delhi is keen on ensuring that in the haste to seal the deal by the time Prime Minister Narendra Modi visits Japan this winter, it doesn’t give in to pressure to adhere to anything more than its own self-declared moratorium on testing. The Japanese insistence on a “nullification” clause that the agreement would cease as soon as India tests, will be judged with this balance in mind. Particularly post-Fukushima, Japanese manufacturers will also be expected to be more generous with India on the liability issue, given their own experience with the enormous cost of cleaning up. As always, and even more so than with the India-U.S. agreement, the devil will be in the detail of the final draft.

**The lines that have been crossed**

While strategic restraint vis-à-vis Pakistan may still persist as grand strategy, the predawn operation into PoK signals that the era of visibly ‘doing nothing’ militarily may be ending  
As the dust settles following the so-called September 29 “surgical strike” which witnessed the publicly acknowledged employment of Indian special forces across the Line of Control (LoC) for the first time in over a decade, it is useful to take stock of the larger implications — what the operation does and does not mean for India’s broader strategic dynamic with Pakistan.  
On the one hand, those heralding a “new era” where India has “called Pakistan’s nuclear bluff” will be disappointed: the operation did not fundamentally alter the strategic options available to India. On the other hand, those decrying that the operation meant absolutely nothing are also wrong: it has very real implications for future iterations of this tragic and dangerous conflict dynamic, and indicates the degree to which domestic political pressure to do something in response to Pakistani provocations against even military targets — let alone civilians — is boiling over.  
Three myths:  
What are the wrong lessons to draw from the surgical strike? First, it does not show that India has “called Pakistan’s nuclear bluff”. There is a lot of self-congratulation in the Indian media that India has finally called Pakistan’s nuclear threat for what they believe it is: a bluff. This is wrong and extremely dangerous. No serious analyst, scholar, or military officer ever argued that the threat of nuclear use against Indian forces was salient, or even possible, for operations across the LoC. It is only operations across the international border — and more likely in the desert sector where India’s 21 Corps has a quantitative and manoeuvre advantage over Pakistan’s forces — which present possible targets for tactical nuclear use (such as logistics, bridgeheads, or concentrated armoured forces) where the threat of Pakistani nuclear use becomes salient. Short of that, and particularly on the LoC, India has always had — and will continue to have — a wide berth to use limited force, both on the ground and in the air. This does not mean that such operations may not escalate to a broader conflict, and there is a real fear they might spiral. But, in and of itself, the surgical strike was well below any Pakistani nuclear threshold, and analysts have long known that. The strike does not mean that India can now conduct operations that significantly attrite the Pakistan military or seize valuable territory across the international border. Pakistan’s nuclear weapons are real, and they impose strategic limits on what India can do.  
Second, the surgical strike does not herald a new era of conventional retaliatory options for India. This was not evidence that India has a proactive strategy (popularly known as Cold Start) option available for deeper punitive strikes — either on the ground or with air and stand-off capabilities. The use of special forces, at most several kilometres across the LoC, was carefully planned and, by most official accounts, highly successful. But one should not be deluded into believing that India has now developed the capability to catch the Pakistan military by surprise with even more punitive strikes than this. The Narendra Modi government was very careful not to use helicopters across the LoC, and even the drone that recorded the strike could have easily loitered over Indian territory to do so. Furthermore, as security analyst Manoj Joshi has shown, one should not mistake special force strikes like this with the capability to conduct deeper covert special operations. This strike should therefore not be read as evidence that India has advanced its so-called Cold Start options.  
Three consequences  
Third, and important, the strike in no way suggests that the government has abandoned strategic restraint as a general grand strategy towards Pakistan. There is a lot of confusion about what strategic restraint means. Most precisely, it means avoiding operations that risk major conventional escalation: attriting the Pakistan military or seizing valuable territory across the international border. Strategic restraint does not mean “do nothing”. It means responding in a way that does not potentially become strategically costly for India by risking a broader conventional war, which carries with it not only human and economic costs, but also the risk of nuclear use if the war spills across the international border. By carefully framing the operation as defensive and pre-emptive, limited in time and scope, and avoiding targeting Pakistan Army personnel, the government squarely stayed within the parameters of strategic restraint. This was a strike with immediate tactical consequences, but it demonstrated significant strategic restraint by what it took great pains not to do: target the Pakistan Army.  
So what, then, are the major implications of the surgical strike? First, although the surgical strike demonstrated immense strategic restraint, it suggests that visibly “doing nothing” militarily may no longer be domestically politically tenable. Given the public outrage, expressed most vehemently online and on television, the notion that attacks by Pakistani-supported militants can be suffered with no response may be increasingly unsustainable. The cumulative harms believed to be suffered by India since the Kargil war in 1999 have slowly built pressure amongst at least a very vocal section of the public that enough is enough. The groundswell of anger, and Mr. Modi’s own professed tough line against militant attacks, tied his hands to some degree. He believed he could not “do nothing” without suffering some damage to his domestic credibility. This dynamic is now a fact. But it is also potentially dangerous. One must walk a fine line with hawkish nationalism. On the one hand, it can generate a deterrent to more audacious Pakistani attacks, if Pakistan fears that hawkish Indian nationalism might force a disproportionate response. On the other hand, hawkish nationalism can force leaders to escalate when it is not in the national interest to do so. Nevertheless, while strategic restraint may still persist as grand strategy, the era of visibly “doing nothing” militarily may be ending.  
Second, and relatedly, although the Indian national security establishment is often given a lot of grief — for one, was there adequate force protection at Uri, and why were the jawans not in fire-retardant tents? — it deserves a lot of credit for how this finely calibrated operation was conceived, planned, executed, and managed. The Modi team needed to find a sweet spot between “do nothing” and abandoning strategic restraint, simultaneously satisfying the domestic political forces baying for blood while avoiding risking further escalation. It found that sweet spot and deserves acknowledgement for it. By publicly announcing that it had responded with a concrete justifiable objective, and highlighting the enduring professionalism of the armed forces, it satisfied wide portions of the media and public. But by limiting the scope and duration of the operation, subsequently framing it not as retaliation but as a pre-emptive strike against an imminent attack from the launch pads, it avoided further escalation by giving Pakistan a largely face-saving way to not have to respond in kind — if it chooses to avail itself of it. For a national security apparatus that is often accused of dysfunction, this strike illustrated that it is immensely capable when it needs to be.  
Altering the long-term dynamics  
Finally, and most broadly, the surgical strike shows Pakistan that it must now consider potential Indian responses in the future. And the nature of those responses may be unpredictable. Perhaps they will be calibrated like this one. Or perhaps they may escalate, if the attacks persist or, worse, expand against civilians in metropoles. Although this strike in and of itself was limited in duration and aims, it sets a precedent that could potentially have a growing deterrent effect on Pakistan. Strategically, Pakistan must now account for potential Indian retaliation where the intensity is uncertain — anywhere from “doing nothing” to higher intensity military action around the LoC — and this is perhaps the most enduring implication of the strike.  
Thus, the strike does have some very real long-term strategic consequences that are important to consider. It was not nothing. At the same time, it is imperative that India does not get drunk on success. The strike was reportedly highly successful at the tactical level, but it did not alter the fundamental strategic dynamic between India and Pakistan — nor was it intended to do so, for very good reasons. It should not thus be viewed as a carte blanche with which India can now impose its will on Pakistan militarily — that is neither possible nor in India’s broader strategic interest. And it remains to see how Pakistan will respond, if at all, which could touch off a dangerous escalatory action-reaction cycle. This is a conflict dynamic, after all, and the adversary always gets a vote.

**Singapore to Rajasthan**

The India-Singapore Strategic Partnership was signed last November between the two nations. But Prime Minister Narendra Modi’s strategy of cooperative federalism means that one of the vehicles of this strategic partnership is the states. Today, Rajasthan and Singapore inaugurate a partnership that will bring world-class skill development in tourism and hospitality to the youth of Rajasthan with the launch of the Centre for Excellence in Tourism Training (CETT) at Udaipur. This partnership for tourism builds on the launch of a direct flight from Singapore to Jaipur earlier this week. During this visit of the prime minister of Singapore to launch the CETT, Rajasthan will also extend our partnership by kicking off projects to improve the tourism ecosystem in Jaipur and Smart Urban Development.  
Singapore now has one of the highest per capita incomes in the world. This was not always so: It was colonised by the British, suffered brutally under Japanese occupation in World War II, and was forced to separate from Malaysia in the 1960s. But under the leadership of late Prime Minister Lee Kuan Yew — described recently by PM Modi as one the greatest administrators and reformers of our times — Singapore has become a beacon of what is possible with hard work and strategic thinking in tourism, education, ports, finance, urban productivity, house ownership, job creation and much else. Singapore has been consistently ranked first in the World Bank ease of doing business global rankings and is considered as the best investment destination in Asia. Singapore is a job magnet and the purposeful and innovative pursuit of job creation by its Economic Development Board (EDB) has been magnificently chronicled by Chin Bock Chan in the book, Heart Work. I hope someday to model our own industries department on the effectiveness of EDB because job creation changes lives in ways that no subsidy ever can.

Tourism is an important engine for job creation in Rajasthan — creation of human capital is key to raising our game. The CETT is being set up at the former campus of IIM Udaipur and 40 of our faculty will soon be leaving for Singapore to be trained. The design, curriculum and pedagogy for the CETT have been drawn up by the world-class Institute of Technical Education, the vocational training arm of the government of Singapore. The CETT aims to produce chefs and front office staff, and the first batch will be graduating next year. In parallel, the direct flight from Singapore to Jaipur has important implications for tourism in Rajasthan because Changi airport is the supreme air hub for south-east Asia — it handles over 55 million passengers every year — and is a perfect gateway for the 1.7 billion people who live within a five-hour flying time to fly directly to Rajasthan. A University of Arizona research paper, The Economic Impact of Non-Stop International Flights, suggested huge primary and secondary impacts on jobs, salaries, and economic activity of such direct flights. Our recent global tourism campaign has raised tourist arrivals by 20 per cent but we are operating far below our potential. We have much to learn from Singapore; it received 15 million foreign tourists last year while we only got 1.5 million foreigners. Singapore may be small but as Voltaire said before the French revolution, “God is not on the side of the biggest armies but the best shots”. Over the last few decades, Singapore has not only been Asia’s most successful nation at poverty reduction but it was early in recognising the huge positive effects of tourism on gender issues, employment, wages, preservation of culture, urban development and much else.

Singapore has demonstrated that you don’t have to be western to be modern and how a poor country can become a rich one in one generation. It has taken the long view by recognising that we don’t live in an economy but a society; this resonates with us because the three pillars of the Rajasthan model of development are job creation, social justice and effective governance. India’s partnership with Singapore is hardly new — since the Chola period our country has not viewed immigration to this tiny nation as brain drain but brain circulation. And some of my childhood inspirations came from the women in the uniform of the Indian National Army based in Singapore. In his wonderful book, The Singapore Story, late Prime Minister Lee Kuan Yew, said “The task of the leaders must be to provide or create for them a strong framework within which they can learn, work hard, be productive and be rewarded accordingly. And this is not easy to achieve.” A rapidly changing world is a world that will be inherited by learners; Rajasthan is delighted to partner with and learn from Singapore.

**Farewell to NAM**  
  
Non-alignment has not been in the vocabulary of PM Modi. But India does not have to denounce non-alignment to follow its present foreign policy  
  
A summit of the Non-Aligned Movement (NAM) without the Indian Prime Minister is like Hamlet without the Prince of Denmark and that is what wasenacted in Venezuela recently. The only other time when an Indian Prime Minister stayed home was in 1979, when the historic Havana summit took place. Prime Minister Charan Singh’s absence, however, had nothing to do with NAM; this time, the absence of Prime Minister Narendra Modi had a political message.  
  
Sources close to the Prime Minister have taken pains to explain that his absence was deliberate as he did not find NAM to be important enough for him to spend a couple of days in distant Venezuela. Therefore, the explanation given by the head of the Indian delegation, Vice President Hamid Ansari, that the summit was not a conference of Prime Ministers and, therefore, Indian participation was adequate did not carry conviction.  
  
Flawed assumptions about NAM  
  
Non-alignment has not been in the vocabulary of Prime Minister Modi. He has been on a quest for selective alignments to suit his needs for India’s development and security. His advisers have now begun to rationalise India’s distancing from NAM. One argument is that NAM did not have any binding principles and that it was a marriage of convenience among disparate countries. This argument arises from the narrow, literary interpretation of non-alignment. Many commentators had felt, right from the beginning, that the word ‘non-alignment’ conveyed the wrong notion that it was not aligning with the power blocs and that the be-all and end-all of non-alignment was to remain unaligned. But the quintessence of non-alignment was freedom of judgment and action and it remained valid, whether there was one bloc or two. Seen in that context, non-military alliances can also be within the ambit of non-alignment, which was subsequently characterised as ‘strategic autonomy’. In other words, India does not have to denounce non-alignment to follow its present foreign policy.  
  
Another argument being heard is that NAM countries did not come to our help on any of the critical occasions when India needed solidarity, such as the Chinese aggression in 1962 or the Bangladesh war in 1971. Even in the latest struggle against terror, NAM has not come to assist India in any way. But the whole philosophy of NAM is that it remains united on larger global issues, even if does not side with a member on a specific issue. India itself has followed this approach, whenever the members had problems with others either inside or outside the movement. NAM positions have always been the reflection of the lowest common denominator in any given situation.  
  
That NAM has no ideal or ideology as a glue is a wrong assumption. Though the criteria for NAM membership are general, anti-colonialism, anti-imperialism and anti-racism were essential attributes of NAM countries. There was a consensus on nuclear disarmament also till India broke ranks by keeping out of the Non-Proliferation Treaty. The diversity reflected in both Singapore and Cuba being NAM members has been its strength. Therefore, Egypt signing the Camp David Accords with Israel in 1978 or India signing the Treaty of Peace, Friendship and Cooperation with the Soviet Union in 1971 did not result in any disruption of membership.  
  
A heritage we can leverage  
  
All said and done, the golden age in India’s foreign policy was in the first 15 years after Independence, when NAM provided a constituency for India because of our non-violent victory over the British and the leadership it provided to the newly independent countries. Our problems were different from the small and impoverished nations that thronged the movement, but Jawaharlal Nehru’s vision and statesmanship inspired them. We did not seek to resolve our problems through the machinery of dispute resolution in NAM, but actively assisted those who sought such assistance. India led the NAM effort to resolve the Iran-Iraq dispute.  
  
As expected, political issues continued to engage NAM and we benefitted from its activism occasionally. In fact, it was through NAM that we operated to counter the efforts to expand the UN Security Council by including just Germany and Japan as permanent members. NAM submitted its own proposal and ensured that no quick fix was permitted.  
  
The question we need to ask is whether our continued involvement with NAM would stand in the way of our 21st century ambitions. The very informal nature of NAM permits members to operate individually. It also has the facility of members reserving their positions, as we did on the non-proliferation positions of NAM. Our new nearness to the U.S. is not a red rag in NAM and our ability to be helpful in formulating U.S. policies gives us an advantage. No NAM country may agree to isolate Pakistan, but the NAM forum will be an effective instrument to project our anti-terrorist sentiments.  
  
NAM is particularly important in elections at the UN, including the possible identification of new permanent members of the Security Council. The NAM position may not be decisive, but in the normal process of consultations, every grouping will get its own weightage and it is convenient to have a lobby behind us. NAM today, like the Commonwealth has always been, is a heritage we need not discard.  
  
The decision to say farewell to NAM is very much in keeping with the new transactional nature of the foreign policy we are developing. NAM was a part of our larger vision for the world, but today it is seen as inconsequential to our present preoccupations. This transformation will not be lost on the world community.

**Between great powers**

US and Russia pay lip service to ceasefire in Aleppo. But their fundamental differences over the Assad regime remain.  
  
For the first fortnight in September, there seemed to be some hope for the 2,50,000 civilians trapped in the northern Syrian city of Aleppo. The United States and Russia agreed on a ceasefire — both the Bashar al-Assad regime and the rebels opposed to him drastically reduced military action and there was hope that humanitarian aid would finally reach those trapped in the city. However, after US air strikes hit Syrian government forces, killing scores of soldiers, the talks broke down. While the US insists that the attack was an accident, Russia and the Assad regime have been sceptical of their justification, and their subsequent bombing of eastern parts of Aleppo has drawn international criticism. France and Spain have co-sponsored a draft resolution demanding that the US and Russia “ensure a ceasefire in Aleppo” by putting pressure on their allies — the Assad regime and the rebels. Russia has dismissed the resolution as a political ploy. Meanwhile, as talks have broken down, civilians in the city and the country as a whole continue to suffer.  
  
Pressure from France, Spain and the UN is unlikely to have a great impact on the ongoing diplomatic stalemate between the erstwhile Cold War rivals. While both the US and Russia pay lip service to the idea of de-escalation in Syria, their fundamental differences over the Assad regime have not been resolved. The US and its allies continue to back anti-Assad rebels, while Vladimir Putin has thrown Russia’s military and diplomatic weight behind the dictator. Attempts to bridge this gap between helping Assad and his regime on the one hand, and trying to depose him on the other, have failed so far. Meanwhile, ISIS continues to be a factor in the region. Now, with international pressure mounting on Russia and UN General Secretary Ban Ki-moon hinting at resolutions, war crimes and sanctions, there may be hope of ceasefire talks being resumed.  
  
However, in the short term, Moscow likely sees little benefit in making any major concessions to the US at the negotiating table. With less than a month to go for the US presidential elections, Putin is under no obligation to deal with the current regime in Washington. US foreign policy and Russia’s assessment of it will depend on who wins the electoral race in November. Meanwhile, after over 200 air strikes from Syrian government forces and counter attacks by the rebels, the civilians in Aleppo continue to be statistics in the great power game.  
  
**A Nobel push for peace in Colombia**

In a long year of war and strife, it is a silver lining that the Nobel Committee in Oslo was spoilt for choice in deciding upon the recipient of the 2016 Peace Prize. A landmark nuclear deal brought a peaceful closure to Iran’s purported nuclear weapon ambitions and paved the way for better relations between Tehran and the West, making the key negotiators leading contenders for the Prize. The yeoman efforts of the White Helmets of Syria, a group of local volunteers in Aleppo and other parts of war-ravaged Syria who help rescue people injured or stranded in bomb attacks in war zones, merited recognition. But the ending of one of the longest-running civil wars was the achievement that got the highest recognition by the Committee. The Nobel Peace Prize for 2016 has been awarded to Colombian President Juan Manuel Santos after his government painstakingly concluded negotiations by signing an accord with the Revolutionary Armed Forces of Colombia (FARC), winding down hostilities in a 52-year-old civil war. The accord, signed on September 26, 2016, provided for the disbanding of FARC militants and for the rebels to join the political process as a routine political party, besides conceding demands by FARC to address inequities in Colombia’s rural areas through development programmes and land distribution. FARC also agreed to dismantle drug production facilities in areas in its control which had helped finance the war against the Colombian government. This was a landmark accord that provided an opportunity not just for peace but also for better prospects in the war against drug production and trade in Colombia.  
  
Merely a week after the accord, the government received a setback as its attempt to get the accord ratified through a referendum failed. About 50.23 per cent of the voters who turned out (the turnout was less than 40 per cent)voted against the peace agreement. Both the government and FARC have ruled out a return to war despite this setback, and even the advocates of the “no” vote, including former President Álvaro Uribe, have sought fresh negotiations for what they deem to be a better accord. The Nobel committee recognises that despite the setback there is the need for a broad-based dialogue to further the peace process. In doing so, it has provided Mr. Santos the persuasive pulpit he had lost following the referendum. The award should enable his government to seek a renewed accord that does not militate against the previous one and seals a durable peace. The Peace Prize is a testimonial to the patience required to bring about closure to complex, long-running conflicts. In this case at least, it is well-deserved  
  
**From Syria airstrikes to cyber attacks, a quick glance at US-Russia rivalry**  
On September 10, the two countries had announced a truce deal that raised hopes for the first time for violence-stricken Syria.  
The former Cold War rivals US and Russia have traded barbs with each other in the recent past over a string of events that have led to worsening of ties between the two countries. After US halted negotiations with Russia over Syria ceasefire, the Department of Homeland Security and Office of the Director of National Intelligence has officially said that the cybercrime offensive from Russia threatens the US presidential elections. US officials yesterday formally accused the Russian government of directing cyber attacks on American political organisations, saying the hacks were “intended to interfere with the US election process”.  
  
On September 10, the two countries had announced a truce deal that raised hopes for the first time for violence-stricken Syria. US Secretary of State, John Kerry had then said, “Today, the United States and Russia are announcing a plan which we hope will reduce violence, ease suffering and resume movement towards a negotiated peace and a political transition in Syria. The United States is going the extra mile here because we believe Russia and my colleague have the capability to press the Assad regime to stop this conflict and come to the table and make peace.”  
  
The truce, which was to begin on Eid al-Adha, soon came under strain when both the countries started accusing each other of breaking the ceasefire. 23 people were killed in an airstrike on September 15. A UK-based Syrian observatory was unable to determine who was responsible for the strikes. Even though the strikes hit the ISIS controlled town Al-Mayadin, it raised a furore on both sides – according to the terms of the ceasefire, ISIS held areas do not come under the ceasefire rules.  
  
While the truce held fragile, it was in force until early October when the US halted all talks of ceasefire in light of the continuing bombardment of Aleppo.

**Managing the next moves**  
Challenge for India’s leaders: To show that strength can be blended with subtlety and deftness.  
Whatever verified facts eventually emerge about the September 29 surgical strikes across the LoC, it appears that the operation was as carefully calibrated as any use of force could be. One danger now is that media triumphalism in India could increase pressure on various actors in Pakistan to “teach India a lesson” and demonstrate their own manly resolve. If the result were a high-casualty attack in the heartland, Indian leaders would feel the need to do something more dramatic than the well-practised tit-for-tat violence across the LoC. This could fuel a harder-to-manage dynamic of actions and reactions whose end point would be difficult for anyone to predict or control with confidence.  
  
India’s key leaders know this, of course. The prime minister has urged other officials not to beat their chests over the blows struck against jihadis and Pakistan last Thursday. The government is mobilising every intelligence and operational resource to detect and interdict potential attacks in Kashmirand the rest of India. Monday’s reported riposte of another attack, in Baramulla, reflects this. If the Pakistani military and militant groups under their control confine themselves to confronting India in Kashmir, escalation should be quite manageable.  
  
The more worrisome possibility is that terrorists will attack “soft” civilian targets in a major Indian city, killing many more than the 19 who died at Uri. If such an attack succeeded, despite preventive measures, the pressure on Indian leaders to respond with unprecedented ferocity would be enormous. Depending on the scale of damage inflicted, the prime minister would be urged to retaliate against targets outside of Kashmir. Pressure to hit the army would be felt, whether or not reliable intelligence proved that Pakistani military leaders authorised or could have prevented such attack.  
  
It can be hoped that Pakistani leaders understand these risks and will do their utmost to prevent terrorist acts that not only would cause India to counter-escalate, but also would elicit ever more international isolation of Pakistan. Yet, at least some militants have their own recruiting and brand-building interests to defy restraints that the army might seek to impose on them. If the Lashkar-e-Taiba and/or Jaish-e-Mohammed lost personnel on September 29, these groups will want to avenge them and demonstrate strength even if Pakistani leaders would prefer more calibrated reactions. Similar drives appeared to give impetus to the 26/11 attacks on Mumbai. The swirling motives and array of actors in Pakistan — and perhaps sympathetic cells of militants already in India — complicate the challenges that both Rawalpindi and New Delhi face.  
For the Pakistani establishment, the primary challenges are to save face and maintain political authority at a time when Kashmiri Muslims in India are suffering and the Indian leadership is displaying muscularity. A Hindutva-inflected government with a forceful prime minister tests the mettle, purpose and self-regard of the Pakistani military (if not other segments of society). For Indian leaders, the challenge is to demonstrate the capability and resolve to “win” any escalatory competition with Pakistan, without engendering human and economic costs that undermine India’s larger national and global interests. In other words, to demonstrate that strength and will power can be blended with subtlety and deftness  
  
The combination of these imperatives raises extremely difficult questions for both leaderships. (Media organisations should treat these issues carefully, too. But quests for clicks, “likes”, and commercial revenue bring out the worst in us.)  
  
For Pakistan, two central questions are: Whether the security establishment is willing and able to prevent militants from attacking targets in the Indian heartland; and, relatedly, whether the establishment is willing to share information with India that could help it interdict attacks that could not be prevented on the Pakistani side of the line. Magnanimity would not be the motive here. Self-interest would be. No one in Pakistan — or anywhere else — should be confident that the action-reaction cycle following a high-casualty terrorist attack would be “winnable” without devastating consequences.  
  
For India, the central questions include the following. What military options exist to respond to a successful major terrorist attack in the heartland in ways that would be punishing enough to motivate Pakistani authorities to demobilise anti-Indian militant groups, and would not prompt further escalation of violence? Assuming that both objectives may not be achievable, what are the probable courses of subsequent conflict and how can India prevail with acceptable risks and costs? What political and diplomatic moves should India make toward Kashmiri groups and Pakistan — again, not out of magnanimity, but in order to place the domestic and international burden on Pakistani leaders to avert escalation?  
  
To ask these questions is to realise how difficult it is to produce feasible and reassuring answers to them. This is the nature of violent conflict under the shadow of nuclear weapons and the cacophony of media-charged politics. History — whether from 1947, or 1965, or 2001, or 2008, or September of this year — shapes the perceptions and interests that leaders and societies must reconcile. Many moves set the stage for the Uri attack and the careful reprisal to it. None of them was the last move. The need now is to think carefully through the next ones.

**Breakdown of LoC ceasefire will make it difficult for the army to control infiltration**

Five years before the 26/11 terror strikes in Mumbai, there was another 26/11, related to Pakistan. Its then prime minister, Zafarullah Khan Jamali, went on national TV and announced a unilateral ceasefire on the international border (IB), Line of Control (LoC) and actual ground position line (AGPL) with India. New Delhi reciprocated the gesture and barring minor violations, the ceasefire between the two neighbours has held. The future of that ceasefire seems to be in peril now.  
  
Even though the government was very careful in phrasing it as along the LoC, as opposed to across the LoC, the surgical strike on September 29 by the army which destroyed seven terrorist launch pads has disrupted the usual pattern of interaction between the two sides. Rawalpindi has denied the cross-LoC strikes but a retaliatory action from Pakistan army against Indian posts cannot be ruled out. This has the potential to escalate to a tit-for-tat response. In such a scenario, both sides will increasingly resort to cross-LoC firing and shelling. The 2003 ceasefire, which is not part of any written agreement, would be the first casualty of these heightened tensions between the two nuclear-armed neighbours  
While an unravelling of the ceasefire may satisfy jingoistic sections of the media, it will have detrimental consequences for India in the long-run. These consequences are not limited to the administrative inconvenience to the soldiers deployed on the LoC, or to greater casualties to innocent villagers on both sides. Locals in Uri are already moving out from the border areas and the situation is sure to be replicated in other areas along the LoC. Beyond their suffering, a breakdown of the ceasefire can undo all the achievements in curbing terrorism in Kashmir in the past decade.  
  
Before the ceasefire came into effect, it was difficult for India to subdue infiltration from PoK. The Pakistan army would provide cover of shelling and firing to infiltrating terrorists. Cases of army’s ambush spots behind the first ridge line on the Indian side being shelled by Pakistani army when they engaged an infiltrating group of terrorists were not unknown. The terrorists could then manage to escape, even when the army had tracked them down.  
  
**India’s efforts show results in Pakistan: Sharif warns military to act on terrorists or face isolation**

India’s sustained efforts at Pakistan’s international isolation have started to show results in Pakistan as well. Pakistani newspaper Dawn reported that the Nawaz Sharif government has directed the military to act against terrorist groups including Jaish-e-Mohammad and its affiliates. The report highlighted friction between the power centres in Islamabad and Rawalpindi. It also added fresh attempts would be made to conclude Pathankot investigation and restart Mumbai attack trials in an anti-terrorism court.  
The report quotes exchanges during an all-party meeting where reportedly military and ISI officials were also present. The paper quotes top sources present at the meeting and the statements come as a huge development as the Pakistani government seems to acknowledge the presence of terrorists and terror actors near the LoC and in PoK. Pakistan Prime Minister Nawaz Sharif has issued a warning to the military to act against terrorists or face international isolation.  
  
After India carried out surgical strikes in Pakistan on terror launch pads on September 29, Pakistan has faced severe flak from international community. Even after repeated denials of the attack, not one country has backed it, including its allies in the Middle East and China. The latter has, in fact, indicated that Pakistan should carry out a course correction and the US has severely came down on the Pakistani authorities for not doing enough to curb terrorism in their country and allowing cross-border terrorism into India. The country got no respite at the UN. Pakistan has remained in a state of abject denial over the presence of terrorists in PoK or near the LoC. Sharif’s reported attempts to warn the ISI also indicate a visible rift between the forces that be in capital Islamabad and Pak GHQ — Pakistani military and ISI centre in Rawalpindi.  
The meeting apparently took place on Monday and according to the outcomes, ISI DG Gen Rizwan Akhtar and National Security Advisor Nasser Janjua will personally deliver a message to provincial apex committees and ISI sector commanders in every province of the country. The report says that the decisions show a high-stake new approach by the PML-N government, and comes after a verbal confrontation between Punjab (Pakistan) CM Shahbaz Sharif and Gen Akhtar.  
  
According to the report, the message was “military-led intelligence agencies are not to interfere if law enforcement acts against militant groups that are banned or until now considered off-limits for civilian action. Gen Akhtar’s inter-provincial tour has begun with a visit to Lahore.” It also added that Nawaz Sharif told the persons present in the meeting that “fresh attempts be made to conclude the Pathankot investigation and restart the stalled Mumbai attacks-related trials in a Rawalpindi anti-terrorism court.”  
  
The report also quoted tense exchanges between ISI officials and Punjab Chief Minister Shahbaz Sharif saying “Addressing Gen Akhtar, the younger Sharif complained that whenever action has been taken against certain groups by civilian authorities, the security establishment has worked behind the scenes to set the arrested free.”  
  
For decades, Pakistani ISI and military intelligence have shielded and helped nurture terrorist groups in their country to carry out terrorism in India. With fresh reports claiming hundreds of terrorists preparing to infiltrate into India before the passes close in winters, Pakistan will need to act. Pakistan will come into extreme pressure from its allies who provide important economic and military aid to the country if it fails to act this time.  
  
The danger of full isolation and sanctions loom large and state governments have started to show their displeasure with the ISI’s conduct in making sure that terror actors are allowed freedom to operate against India and that puts them on a lower moral and strategic position.

**NATIONAL NEWS : POLITY, GOVERNANCE**

**The case against simultaneous polls**

* If concurrent Lok Sabha and Assembly elections were to be a reality, it would go against the political diversity essential for addressing the social diversity of India.
* simultaneous elections will save a lot of money and will help the government carry forward the developmental project without many hindrances.

The real question, however, is not of desirability; it is one of feasibility. Can simultaneous elections for both the Central and State legislatures be implemented given the federal nature of Indian democracy guaranteed by the Constitution?

**The question of cost**

* a huge amount of money is spent in conducting elections in India, both by the candidates themselves and political parties as well as the government (the Election Commission of India). However, the argument in favour of simultaneous elections does not seem to be based on saving the money spent by political parties and candidates, but by the Election Commission. There is hardly any doubt that the fewer the number of elections, the lesser would be the expenses.
* But elections are the lifeblood of democracy. f Lok Sabha and Assembly elections happen to coincide, it is a natural process. But if it is imposed only to reduce the number of elections and cut costs, it is highly undesirable, because it privileges monetary concerns over democratic principlIes
* During elections the Model Code of Conduct is in force for much of the time, which prevents the government from initiating new projects and ultimately slows down development work. While this is true, in order to overcome this problem, it may be more useful to make changes in the Model Code of Conduct to allow the government to initiate projects and programmes till a reasonable period (maybe till the notification of elections) instead of the existing scenario where the code comes into force the day the elections are announced. One should not also forget that there is a provision in the Model Code of Conduct that the government can consult the Election Commission about policy decisions and if the decisions are not likely to have any implications for the electoral outcome, the Commission can permit the government to take those decisions.  
  Also, in the normal course, the code should apply only to the State where Assembly elections are to be held. There is no logical reason why governance in the rest of the country, and at the Centre, should come to a standstill, unless the so-called policy decisions are intended to be taken to influence the electoral outcome in the State where elections are to be held. In this case, it is not the holding of the election that stops governance, but the suspect intentions of those who are supposed to govern.

Undermining the federal structure

* The argument, or slogan, of “one country, one election” is misleading. this label overlooks that while India is undoubtedly one country, the Constitution also recognises the existence of 29 States which have a constitutional status of their own in matters of elections and government formation.
* The seeming intention to force all States, and sometimes it has even been mentioned all panchayats, not only seems impractical but also a step in the direction of moving the country towards becoming a unitary state rather than a federal one that the Constitution envisages.
* The voters are better placed to express their voting choices keeping in mind the two different governments which they would be electing by exercising their franchise. This distinction gets blurred somewhat when voters are made to vote for electing two types of government at the same time, at the same polling booth, and on the same day. There is a tendency among the voters to vote for the same party both for electing the State government as well as the Central government. This is a rule rather than an exception, not based on assumption but on evidence.
* When simultaneous elections for the Assembly and the Lok Sabha coincided in some States, in 24 elections the major political parties polled almost a similar proportion of votes both for the Assembly and the Lok Sabha, while only in seven instances was the choice of voters somewhat different.
* During the same period, when in many States the Assembly and Lok Sabha elections were held at different times, the electoral outcome (votes polled by different parties) of the two elections has been different.
* state governments agreeing to the untimely dissolution of the Assemblies, the question of what happens if a government falls without completing its term, and several such issues — if simultaneous elections were to become a reality, it would go against the political diversity which is essential for addressing the social diversity of India.

**‘Citizenship amendment bill communally motivated’: Activists**

Civil society groups are opposing the Citizenship (Amendment) Bill, 2016, terming it “communally motivated humanitarianism.”

Why is it being opposed?

The proposed amendment to the Citizenship Act, 1955, seeks to grant citizenship to non-Muslim minorities from Muslim majority countries, namely, Hindus, Sikhs, Buddhists, Jains, Parsis and Christians from Afghanistan, Bangladesh and Pakistan.

According to activists, this would mean, for instance, that the sizeable population of Hindu migrants from Bangladesh living in Assam would become citizens while Muslims who migrated to Assam from East Bengal a century ago would continue to be harassed as ‘illegal migrants from Bangladesh.

The new Bill also violates Article 14 of the constitution, say activists. Since Article 14 of the Constitution guarantees equality to all persons, citizens and foreigners, differentiating between people on the grounds of religion would be in violation of the constitution.

The Citizenship (Amendment) Bill, 2016- Highlights of the Bill:

* The Bill amends the Citizenship Act, 1955 to make illegal migrants who are Hindus, Sikhs, Buddhists, Jains, Parsis and Christians from Afghanistan, Bangladesh and Pakistan, eligible for citizenship.
* Under the Act, one of the requirements for citizenship by naturalisation is that the applicant must have resided in India during the last 12 months, and for 11 of the previous 14 years. The Bill relaxes this 11 year requirement to six years for persons belonging to the same six religions and three countries.
* The Bill provides that the registration of Overseas Citizen of India (OCI) cardholders may be cancelled if they violate any law.

**Paper 2 Topic: Welfare schemes for vulnerable sections of the population by the Centre and States and the performance of these schemes; mechanisms, laws, institutions and bodies constituted for the protection and betterment of these vulnerable sections.  
Two-thirds of elderly financially dependent on others, says stud**y  
A nation-wide survey was recently conducted by Agewell Foundation on the state of elderly people in India. The survey conducted involved a random sample of 15,000 people across India aged 60 or above.    
**Highlights of the survey:**65% of the elderly in India are dependent on others for their financial requirements and undergo financial crisis. Pension was the main source of income for 38% of the respondents.  
The net-worth value of 46.4% of the elderly has increased remarkably in their old age, primarily due to a sharp increase in real estate prices over the last two decades. With high net-worth value, older persons have higher purchasing power, but they hardly use their discretion while exercising such powers. Younger family members often manipulate their decisions.  
More than four-fifths of the respondents said that their major problems were related to healthcare issues, where financial status plays a key role.  
The report finds that senior citizens aged over 70 are marginalised and isolated to a large extent. Older persons in the category of 60-70 years are looked after well by their children, but with further advancement in their age, children find it difficult or they are unable to look after them because of their own growing age and ever-increasing responsibilities towards their own children.  
According to the report, the financially well-off older people do not wish to be dependent on government facilities for healthcare needs, as they prefer private institutions for better services. Financially insecure old people expect social security, free health care and subsidies so that they can lead a comfortable and respectable life in old age.  
Older people with sound financial health look forward to risk-free investment schemes, so that they can earn good returns to meet financial needs in old age.  
Sources: the hindu.  
  
**Paper 2 Topic: Separation of powers between various organs dispute redressal mechanisms and institutions.  
  
Bihar brings in new law banning liquor consumption, will challenge HC order  
Bihar government has notified the Bihar prohibition and excise act, 2016.**  
Key facts:  
  
This is a new and more stringent liquor-ban law with provisions such as arrest of all adults in the family if anyone consumes or stores alcohol.  
It aims to ensure that the ban on sale and consumption of alcohol, including Indian-made foreign liquor (IMFL), continues in Bihar.  
Those flouting the ban face up to 10 years in jail, a fine of up to Rs 10 lakh and there is also a provision to confiscate the house or premises where liquor is stored or drunk.  
Though in a rare case, it also prescribes death penalty if people die after consuming hooch.  
Enforcement of the new law, calculated to impose prohibition in a holistic manner, would repeal the previous excise laws in the state.  
  
Background:  
Recently, the Patna High Court had quashed the government notification banning the consumption, storage and sale of all types of liquor in the state. The court held that the penal provisions were “unreasonable and draconian” and “cannot be justified in a civilised society”.  
Way ahead:  
Experts say the new law – which contains many of the provisions of the law that was scrapped – will immediately be challenged in court.  
Sources: the hindu.

**Vayoshreshtha Samman-2016**They are National Awards for Senior Citizens. They were recently presented by the President to eminent senior citizens and institutions in recognition of their service towards the cause of elderly persons, especially indigent senior citizens.  
Vayoshreshtha Samman is a Scheme of National Awards instituted by the Ministry of Social Justice & Empowerment (D/o Social Justice & Empowerment) initially in 2005 and was upgraded to the status of National Awards in 2013, for institutions involved in rendering distinguished service for the cause of elderly persons especially indigent senior citizens and to eminent citizens in recognition of their service/achievements.  
Ministries of Social Justice & Empowerment, Health and Rural Development are running such useful schemes for the welfare of elderly persons.  
The awards are presented on 1st of October every year pursuant to the adoption of a resolution by the UN General Assembly to observe the year 1999 as the International Year of Older Persons.

**5th International Buddhist Conclave**  
It is being organized by the Ministry of Tourism in Varanasi-Sarnath in collaboration with the State Governments of Uttar Pradesh and Bihar.  
Participants in the Buddhist Conclave will include international Buddhist opinion makers, tour operators and media, as well as State Governments and domestic tour operators promoting pilgrimages to the Buddhist sites in the country.  
The International Buddhist Conclave is also one of the initiatives being taken by India as its commitment as the land of origin of Buddhism and to improve the experience of pilgrims as well as tourists wishing to savor the essence of Buddhist heritage, at the Buddhist sites of the country.  
The Conclave will include presentations, panel discussion, business to business meetings between the international and domestic tour operators, an exhibition highlighting the Buddhist attractions in India, as well as visits to important Buddhist sites in and around Varanasi and Sarnath.

**Management of Haj Pilgrimage**Following President Pranab Mukherjee’s assent to amendments to the Government of India (Allocation of Business) Rules, 1961, the Centre has transferred the management of Haj Pilgrimage, including administration of the Haj Committee Act, 1959, to the Minorities Affairs Ministry.  
The Ministry of External Affairs has dealt with the Haj pilgrimage and other aspects of the Act so far.  
Under the amended business rules, the Ministry would however, continue to oversee other pilgrimages to places outside India under the Indian Pilgrimships Rules, 1933, and pilgrim parties from India to shrines in Pakistan and vice versa.

**Paper 2 Topic: Statutory, regulatory and various quasi-judicial bodies.  
  
Centre constitutes Insolvency and Bankruptcy Board**The Centre has constituted a four-member Insolvency and Bankruptcy Board of India (IBBI) under the Chairmanship of MS Sahoo.  
  
Key facts:  
  
The oath of office was administered by Finance and Corporate Affairs Minister Arun Jaitley.  
Sahoo is appointed as IBBI Chairman for a period of five years.  
  
  
Way ahead:  
  
While the Centre has for now set up the IBBI with four members, going forward this will be expanded to 10 (including the Chairman). Three whole-time members and two other members are to be appointed.  
  
Background:  
  
Insolvency and Bankruptcy Code 2016 seeks to establish the Insolvency and Bankruptcy Board of India, to oversee insolvency resolution in the country.  The Board will have 10 members, including representatives from the central government and Reserve Bank of India.  It will register information utilities, insolvency professionals and insolvency professional agencies under it, and regulate their functioning.  
  
**Insights into Editorial: Behind the Ire of the Marathas**The issue of reservation has once again come to the fore. Marathas in Maharashtra have come out on the streets in unprecedented numbers and with unusual calm to present their grievances.  
What’s the issue?  
  
Marathas have reiterated their demand for reservations, similar to communities in other states, notably the Gujjars in Rajasthan, Jats in Uttar Pradesh, and Patels in Gujarat. On the other hand, they have also demanded for the repeal of the Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act (PoA).  
  
  
  
Background:  
The Marathas who are almost one-third of Maharashtra’s population are not a homogeneous community. Historically, they evolved from the farming caste of Kunbis who took to military service in medieval times and started assuming a separate identity for themselves. Even then they claimed hierarchy of 96 clans.  
But the real differentiation has come through the post-independence development process, creating classes within the caste:  
A tiny but powerful section of elites that came to have control over cooperatives of sugar, banks, educational institutions, factories and politics, called gadhivarcha (topmost strata) Maratha.  
The next section comprising owners of land, distribution agencies, transporters, contracting firms, and those controlling secondary cooperative societies, is the wadyavarcha (well-off strata) Maratha.  
The rest of the population of Marathas comprising small farmers is the wadivarcha (lower strata) Maratha.  
Demand for Reservation:  
The demand for reservation for the Marathas has been around since 1997. Various committees were appointed to look into the matter.  
The government-appointed committee under a retired judge R M Bapat, had rejected granting them inclusion in the Other Backward Classes (OBC) in its July 2008 report.  
The government instead of rejecting or accepting the report appointed a new committee under the retired judge B P Saraf.  
Before the Saraf committee submitted its report, the government set up another special committee headed by Narayan Rane. Rane recommended 16% reservation.  
The eager government got it accepted by the cabinet and hurriedly issued an ordinance. To its misfortune, the Bombay High Court stayed it in a matter of a public interest litigation (PIL) objecting to the OBC status for the Marathas. This was simply because total reservations in the state would go up to 73%, exceeding the limit set by the Supreme Court.  
Why there is a need to reexamine our reservation policy?  
Changed external conditions: Since independence, the external conditions which initially led to reservations have changed tremendously. Economic growth has resulted in a decline in poverty numbers from 37% of the population to 22%. Such development should have brought down the number of people seeking reservations, in contrast, rewards to government jobs have grown sharply.  
Increased popularity: Wage increases associated with the Sixth Pay Commission and the expected implementation of the Seventh Pay Commission have made government jobs highly attractive. Hence, many groups historically tied to the land are now seeking favourable treatment while seeking entry into non-farm work.  
Increased competition: In the last decade, access to government jobs has been declining for all groups. The India Human Development Survey (IHDS) by University of Maryland and National Council of Applied Economic Research shows that although in 2004-05 15.3% of men aged 22-39 with education level of class 12 or more had a regular salaried job in the government or public sector, this proportion fell to 11.7% by 2011-12. This is because government jobs have stagnated while educational attainment has increased rapidly. Thus, it is not surprising that more claimants for these scarce jobs are aggressively staking their claims.  
Ambiguity in the reservation process: Since the First Backward Classes Commission headed by Kaka Kalelkar submitted its report in 1955, several attempts have been made to identify backward castes, resulting in frequent discordance between these lists. Lack of consistency and clarity has led to ambiguity in the entire process of reservation, leaving communities like Jats, Marathas and Patels dissatisfied.  
Lack of Data: The problem is exacerbated by the lack of credible recent data. Since the 1931 Census, the only effort at collecting data on different castes and their socio-economic circumstances was undertaken by the Socio-Economic Caste Census (SECC), 2011. The National Commission for Backward Classes claimed, in a report dated February 2015, that these data are neither available nor usable for the purpose of establishing the economic condition of various castes.  
How can we address these problems?  
Regular Surveys: Conduct regular surveys to identify the beneficiaries who can claim the benefits under the reservation policy. This can be achieved by including data on caste in census surveys. The present phase in the planning cycle of the 2021 Census is the ideal time for ensuring that comprehensive data about caste and religion for all the groups, including forward castes, backward castes, and SCs and STs, are included in this Census.  
Reevaluation: These data should also be used to re-evaluate the eligibility of groups for inclusion in reserved categories every 10 or at least every 20 years. Much of the social stratification in India is linked to the occupational status of the various castes. With the changes in the economy, we can expect both the link between caste and occupation to weaken and the economic fortunes of various occupations to change considerably. The opportunity for re-examination of the caste-wise economic status would facilitate the setting up of a structure for the redressal of grievances.  
Ensure wider reach: We must also find a way of ensuring a churn in the number of individuals eligible for benefits to ensure that these benefits reach the widest segment of society. Though the creamy layer criteria exist, it has not been very effective. With the advent of the Aadhar card, one way of ensuring that the same families do not capture all the benefits is to ensure that each time someone uses their reserved category certificate, their Aadhar number is noted down and linked with the certificate.  
Limiting the use: It may be stipulated that the reserved category certificate can be used only once in 20 years, thus allowing for the benefits to reach even the sections that have hitherto been excluded from their ambit. This would ensure that the same individual is not permitted to obtain both college education as well as a government job by using the same eligibility criterion, nor can one obtain an initial posting as well as promotion using the same criterion.  
Way ahead:  
The main argument of the Marathas is that a majority of them are backward. This argument is axiomatic, applicable to any caste or community including Brahmins, and pricks the logic of backwardness as the basis for reservations. It is true that the majority of the Marathas are small landholders, and they took pride in their sociopolitical dominance, neglected education as well as the changing environment. Over the years, with mounting agrarian crisis, mainly due to neo-liberal policies of the government, accentuated by the crop failures in Maharashtra in the previous three seasons, they experienced severe erosion of their status.  
However, as a community, they still own most land (32% of Marathas own in excess of 75% of land) and dominate all spheres of public life. Even then if they are included, the other OBCs will be up in arms against them; some already are.  
Conclusion:  
The key to dealing with the quota quagmire lies in shuffling people in and out of the eligibility criteria and ensuring that the benefits are not concentrated among certain groups and/or individuals. All these principles are consistent with the democratic ideals and vision of social justice envisaged in India’s Constitution. It may be possible to achieve a consensus across the political spectrum for adopting a non-political and pragmatic approach to reservations. It is time we address the challenge of reservations honestly, fairly and innovatively by creating opportunities for all disadvantaged children. Along with improving school education outcomes, a more rational model of reservation based on equity and common sense must be envisaged

**Across the aisle: How free is freedom in India?**

Since the 1960s, we have approached the issue of ‘freedom vs control’ from the wrong end.

Twenty-five years after the Congress government under P V Narasimha Rao ushered in “liberalisation” of the economy, India has still not come to terms with the idea of economic freedom. This is disappointing for a country that was at the forefront of the struggle for political freedom for all countries.  
We understand political democracy, but we do not understand economic democracy. I confess that I was a convert to the idea of an open, liberal and competitive economy after flirting with socialism in my formative years.  
Freedom is Indivisible  
Political freedom and economic freedom go together. I urge you to take a look at Article 19 of the Constitution (as originally incorporated) that, along with Articles 14 and 21, constitutes the core of the fundamental rights enshrined in the Constitution that we “gave unto ourselves”. The founding fathers were wise and placed political and economic rights on a par. Freedom of speech and expression [clause (a)] was on a par with freedom to carry on a business, trade or profession [clause (g)]. Freedom to form an association [clause (c)] was on a par with freedom to hold property [clause(f)]. The founding fathers understood how one set of freedoms reinforced the other and how each set would be meaningless without the other.  
A little known set of Articles of the Constitution is a group consisting of Articles 301 to 305. If it had been interpreted correctly, Article 301 would have ushered in the idea of One Nation, One Economy. The Article declared that “Trade, commerce and intercourse throughout the territory of India shall be free”. That bold idea was smothered by interpretation and scuttled in implementation. State governments and rent-seekers were happy — until they were called out in the few cases that reached the higher courts.  
Governments restrict economic freedom in many ways. Once upon a time the regime was so oppressive that it gave rise to the infamous description of India’s governance model as the ‘licence-permit-quota raj’. Some restrictions are justified as legitimate requirements, such as registering a business or getting environmental clearance. They are legitimate, but the legitimacy is mostly eroded by the inordinate amount of time it takes to get that piece of paper.  
How does India fare?  
Every year, the World Bank publishes a study called the Ease of Doing Business report. It ranks countries on ten parameters such as Starting a Business, Getting Electricity, Registering Property, Getting Credit, Paying Taxes and Enforcing Contracts. Between 2015 and 2016, India’s rank remained the same or worsened on seven of the ten parameters. It improved only on three parameters, but even on these three counts, there is nothing to crow about. On Starting a Business, India’s rank improved from 164 to 155, on Dealing with Construction Permits from 184 to 183, and on Getting Electricity from 99 to 70. On Getting Credit the rank has worsened from 36 to 42, on Paying Taxes it is 157 and on Enforcing Contracts it is a lowly 178. Overall, India’s rank in 2016 is 130 out of 189 countries. Compared with emerging market economies, India ranks 22 out of 23 economies, with only Egypt below us.  
Since the 1960s, we have approached the issue of ‘freedom vs control’ from the wrong end. We started with ‘control’ and then looked at relaxations bit by bit. The correct approach is the exact opposite. We must start with ‘freedom’ and then look at what minimum regulations will be necessary to ensure a level-playing field and compliance with the laws. The first time that I attempted the latter approach was in 1991-92 when we made a bonfire of the dreaded Red Book (that controlled exports and imports) and wrote, in plain English, a 100-page Import-Export Policy. I tried that approach again with the Direct Taxes Code: there are three versions of the Code gathering dust, but the government has declared, unfortunately, that it is not inclined to replace the 55-year old Income-tax Act.  
The other way in which the State interferes with economic freedom is in the purported exercise of its power to punish wrongdoers. I think it is a waste of the State’s time, energy and resources if it goes about looking for ‘wrongs’ and ‘wrongdoers’ in every activity. When administrative or business decisions are taken, mistakes will be committed, but every mistake is not a ‘wrong’ that must be investigated and punished. In matters concerning the economy, the State must punish only egregious wrongdoing that has large externalities and baneful consequences.  
We are mostly unfree  
The Heritage Foundation and The Wall Street Journal publish an annual Index of Economic Freedom based on ten factors of ‘economic freedom’. India’s rank is 123 out of 178 countries, placing us in the ‘mostly unfree’ category. The World Economic Forum’s Global Competitiveness Index measures the ‘competitiveness’ of an economy, and India’s rank, released a few days ago, is 39 out of 138 economies; but on some key parameters such as health and primary education, higher education, labour market efficiency and technological readiness, India is at 81 or lower. These are wake-up calls. Lack of economic freedom, low competitiveness and obstacles to doing business hurt investment, growth, job creation, consumers and, above all, poor people and poor regions.  
Despite the reforms since 1991, which is a remarkable story, the State-to-firm interface remains a problem. What need to be done and what can be done deserve a separate column and I hope to be able to write one soon.

**To be truly transparent**

Only a full-time commission, which is independent of the government and the judiciary, can impart transparency and credibility to the system of appointments to the higher judiciary  
  
The Constitution of India gave the higher judiciary another important function in addition to adjudication of disputes: to regulate the executive and legislature to stay within the bounds of their powers — to prevent the executive from violating the laws, the Constitution and the fundamental rights of people guaranteed by the Constitution, and the legislature from violating the Constitution. The Supreme Court was anointed the final arbiter of the Constitution, and in 1973, in the landmark Kesavananda Bharati case, it held that even a constitutional amendment could not violate the basic structure of the Constitution.  
For this reason, the independence of the judiciary from the executive and legislature has been regarded a cornerstone of the Constitution, and the Supreme Court has held it as an inviolable part of the basic structure of the Constitution. It is on this basis that the Supreme Court, in the Second Judges Case in 1993, took over the power of appointing judges from the executive to itself, holding that the government’s primacy in appointing judges would also compromise the independence of the judiciary. The independence of the judiciary was seen not just as functional independence but independence in manner of appointments.  
Opacity in appointments  
Since then, a collegium of three/five senior-most judges of the Supreme Court have had the decisive say in selecting judges to the Supreme Court/high courts. This creative reinterpretation by the Supreme Court of the Articles of the Constitution dealing with appointment of judges has improved independence of the judiciary, inasmuch as judges appointed subsequently are less liable to be politically partisan or be influenced by the executive. It has, however, not fully solved the problem of independence, since judicial independence is also compromised by the lure of post-retirement jobs in commissions and tribunals, in the hands of the executive, or the permission for foreign trips for judges, also in the hands of the government.  
When the power to appoint was with the government, especially in the later years, the government often used it to appoint politically partisan or subservient judges. Also, since there was no transparency, appointments were often arbitrary and nepotistic. With appointments taken over by the judiciary, the government’s ability to influence the appointments and thus appoint politically partisan or pliable people got reduced, but the problem of nepotism and arbitrariness continued. The collegium also did not lay down any criteria for appointments or any method for evaluating candidates on those criteria. It also did not lay down any system for transparency in appointments. Thus, appointments continued to be made in an arbitrary and nepotistic manner with the people not being informed about who was going to be appointed and on what basis. Earlier it was said that in order to become a judge, one did not need to know the law but the law minister. It is now said that one need not know the law but the existing collegium of judges to become a judge.  
In order to regain some control over appointments, the government introduced the National Judicial Appointments Commission (NJAC) Act. This Act provided for a selection committee of six people, which included three senior-most sitting judges of the Supreme Court, the Law Minister, and two persons to be selected by a committee of the Prime Minister, the Leader of the Opposition and the Chief Justice of India. It also provided that the Secretariat of the Appointments Commission would be in the Law Ministry. It further provided that any two members of the NJAC could veto the recommendation of the other four.  
Government vs judiciary  
Experience has shown that the Prime Minister and the Leader of the Opposition (who also hopes to become Prime Minister) are usually in agreement about appointing weak and pliable people to regulatory institutions and those who select members of such institutions, in order to weaken regulation of the political class. There was thus justified apprehension that the NJAC would dilute independence of the judiciary by giving the government a significant say in appointments. Therefore, the Supreme Court struck down the constitutional validity of the amendment introducing the NJAC as well as the NJAC Act on the ground that it diluted the independence of the judiciary which was part of the basic structure of the Constitution.  
However, the Supreme Court did not take this opportunity to lay down any system of transparency in selection of judges. On the other hand, it left it to the government to devise a memorandum of procedure for selecting judges, which would have to be approved by the Chief Justice of India. This has resulted in the government trying to introduce clauses that could enable it to veto any recommendation on national security considerations. The memorandum of procedure is therefore stuck, with no agreement in sight between the government and the Chief Justice of India. The government is using this to delay appointments recommended by the collegium. Judicial appointments have thus become hostage to the fight between the government and the judiciary on who should control appointments.  
Need for a full-time body  
The Campaign for Judicial Accountability and Reforms has for long recommended that selection to the higher judiciary must be made by a full-time (not ex officio) body, which is independent of the government and the judiciary and which goes about the selection in a rational and transparent manner. The business of selecting hundreds of judges in a year to the higher judiciary, if done properly, would require at least a thousand candidates to be considered and comparatively evaluated over multidimensional criteria in a fair and rational manner. This would require a full-time body, which could devote itself to this process, with a large secretariat. The job cannot be done by an ex officio body of judges and the law minister, who are extremely busy persons.  
There also needs to be some transparency in the selection to prevent arbitrariness or nepotism. Minimum transparency would require that the criteria for selection of judges be made known, the comparative evaluation of candidates also be made known, and names of shortlisted/selected candidates announced before appointment, so that those who have relevant information about the candidate can send it to the appointing authority. Basic criteria to judge the competence of a candidate should include integrity, competence, judicial temperament, common sense and sensitivity towards the problems of the common man, among others. A system modelled on the British Judicial Appointments Commission, which follows a method to evaluate candidates based on predetermined and set criteria, is well worth considering.  
The members of the selection authority could be retired judges or even laypersons and should be selected by a broad-based selection committee in which the government and the judiciary play a role, but not a dominant one. It is only such an independent full-time body that can be expected to select judges in a fair and rational manner.  
  
End the turf tussle

While the Right to Information Act made the judiciary a public authority, the judiciary has stymied the right to information vis-à-vis itself and consistently refused to disclose information on its administrative or judicial functioning. Information on judicial appointments and pending judgments has been refused by the Supreme Court, that has challenged every decision of the Central Information Commission asking it to disclose such information.  
Appointments to the higher judiciary are too serious a business to be left to people who do not have any time and who function without any system or transparency. It is imperative that a system for selection of judges be put in place and a full-time independent body be constituted to ensure that only those persons who are in tune with the egalitarian constitutional philosophy, and who have some sensitivity and understanding about the common people of the country are appointed.  
The road to securing judicial accountability is long and hard, but proper accountability for such a powerful and vital organ like the Indian judiciary is essential for the survival of the rule of law and democracy in this country. The time has come for the people of the country, who are the real stakeholders in an honestly functioning judiciary, to assert themselves and demand for such a body to be appointed and this scuffle over judicial appointments to be laid to rest.

**UGC must give clarifications on courses recognised by it: CIC**

CIC says the UGC, other public authorities cannot deny clarifications sought by RTI applicants if it is part of their duty to collect that information

University Grants Commission (UGC) and other public authorities cannot deny clarifications sought by RTI applicants if it is part of their duty to collect that information, the CIC has said, rejecting the plea of the higher education regulator that explanations cannot be sought under the transparency law.  
  
In several previous decisions, the Commission and high courts have allowed public authorities to reject RTI applications if the applicant is seeking explanations and clarifications.  
  
The argument given by the Central Information Commission (CIC) and the high courts had been that clarifications or probing questions do not fall within the ambit of the definition of “information” under the RTI Act.  
  
Information commissioner Sridhar Acharyulu made a major distinction in his order in the matter, saying the University Grants Commission (UGC) or any public authority cannot refuse to give clarifications if it is part of their duty.  
  
The CIC has also issued a show-cause notice to an under secretary-level officer of the UGC who had refused to clarify to an RTI applicant whether a particular course was recognised by it.  
  
The UGC had denied to share the information, saying it can only give information about records held by it and cannot give clarifications under the RTI Act.  
  
Acharyulu was deciding the plea of Ram Kishan Sharma who sought to know the list of UGC recognised courses for career advancement scheme.  
  
“The policy of UGC must be providing clarifications for such genuine academic doubts. Though it appears to be technically right according to section 2(f), it leaves student community in confusion regarding validity of a course. “Not informing the validity of a course amounts to abdication of their duty to inform, as that duty was prescribed by the statute and that is their basic function,” he said.  
  
The Information Commissioner admonished the UGC, saying “policy deficit” in the organisation has been exposed by the RTI application. “In fact, the UGC has to understand the doubts of such students or parents and recognise the need for clarification arising out of such RTI applications and prepare the FAQs accordingly. “The UGC should entrust a team to scrutinise such requirements out of the RTI applications and continuously increase the number of clarifications under FAQs,” Acharyulu said in the order.

**Brewing trouble**

Nitish Kumar should not turn his misguided prohibition policy into a tug of war between legislature

Keeping one step ahead of the law cannot possibly be a credible political strategy, but the government of Nitish Kumar in Bihar seems to have committed itself to this radical path, leveraging legislative independence to counter legal intervention. Last week, the Patna High Court struck down the Bihar Excise (Amendment) Act, 2016, declaring illegal the April 5 notification which had banned the production, storage and sale of alcohol in the state. Prohibition was effectively countermanded, since the very heart of the act had been ripped out. But on Gandhi Jayanti, Kumar retaliated by notifying the Bihar Prohibition and Excise Act, 2016. It retains some draconian features of the old law which the high court had declared illegal. In a separate action, the government will appeal in the Supreme Court against the strike-down in the high court. In spite of the court, Kumar has maintained his misguided commitment to prohibition. In the few days when it was not in force, Bihar faced only one interesting question: What was the status of the 13,000-odd people who had been arrested for violations? Would they have to be let off en masse?  
The court had found prohibition in Bihar to be ultra vires of the Constitution and unenforceable, noting that criminalising possession was arbitrary, and that the penalties attracted were so draconian that they smacked of a police state. For instance, prohibition had introduced the legally suspect notion of guilt by association. All adults in premises where liquor was used or stored were declared to be culpable, on the ground that the offence could not have been committed without their knowledge. Similarly, entire villages where illicit stills were discovered were threatened with punitive action. Guilt by association and collective punishment are primitive political strategies designed to overawe whole communities. They have no place in the codex of a democratic state. If the same logic were applied to other crimes and misdemeanours, a single pickpocket could send off an entire village to jail. The possibility for perfectly legal absurdity is endless  
Prohibition as a permanent feature of state policy does not sit well in a democracy, either. The nanny state may be invoked as a local, temporary measure to stave off social crises, where alcohol abuse assumes alarming proportions and elicits public revulsion. Kumar introduced prohibition to appeal to women voters, and on Sunday he spoke of villages where mayhem used to rule in the evenings, and which are now at peace. This may be true, but the state cannot keep the peace forever with a punitive law. Democracy is founded on choice — even the choice of what may be imbibed. Any infringement of choice should be strenuously resisted by the courts.

**Storyteller vs mob  
Protests over Mahasweta De**

A students’ production of Mahasweta Devi’s celebrated story, Draupadi, at the Central University of Haryana on September 21 has triggered protests involving sections of the students, ABVP cadres and local villagers in the neighbourhood who claim that it shows the army in poor light. The university has apologised for allowing the play and has instituted a probe against two teachers who helped with the production. The university’s action amounts to insulting the memory of a great writer, celebrated for her powerful articulation of the tribulations experienced by the poor and the oppressed and their resistance. Devi is part of the literary canon. Her writings are bound to be read, studied and staged in campuses. Like most great writers, she wrote to disturb, provoke and reflect. It is shameful that a central university administration chose to cower before the mob. The ABVP students, who reportedly initiated the protests, would have done well to refer to BJP chief Amit Shah’s tweet when she passed away in July. “Her contribution to Indian literature is peerless, Rudali and Hajar Churashir Maa were my personal favourites,” he had tweeted.  
Draupadi is a fine example of Devi’s writings. A powerful indictment of state violence, it is the story of Dopdi Mejhen, an Adivasi woman, who is accused of being an extremist and is hunted by the security forces. They brutally rape her but she refuses to be humiliated and confronts her attackers. “You can strip me, but how can you clothe me again!” is her powerful indictment of the men who assaulted her. Years later, Devi’s story, set in the West Bengal of 1970s, was adapted by the Manipuri playwright, H. Kanhailal, for the stage in Imphal, which was under the Armed Forces Special Powers Act. Four years later, 12 mothers in Manipur stripped off their clothes at the Kangla Fort in Imphal, which housed the security forces, to protest the rape of Thangjam Manorama, who was allegedly raped and killed by Assam Rifles personnel, almost an enactment of the protest of Devi’s Draupadi.  
Down the years, the Draupadi story has been retold and reenacted in many forms, in newer contexts. Pregnant with multiple meanings, artists have found in the Pandava queen’s story a powerful metaphor to highlight the patriarchal nature of political power and the violence it inflicts on women. To interpret Devi’s version narrowly as a criticism of the jawans battling on the border is to misinterpret the writer and misunderstand her art.

**Cabinet approves amendment to HIV/AIDS Bill**

Establishments keeping records of information of HIV positive persons shall adopt data protection measures.  
A draft law, which seeks to protect the interests of persons with HIV and AIDS, got more teeth on Wednesday with the government approving amendments to bring in legal accountability and establishing a formal mechanism to probe complaints against those who discriminate against such people.  
The Union Cabinet approved amendments to ‘The HIV and AIDS Bill, 2014’ drafted to safeguard the rights of people living with HIV and affected by HIV.  
The bill lists various grounds on which discrimination against HIV positive persons and those living with them is prohibited. These include the denial, termination, discontinuation or unfair treatment with regard to employment, educational establishments, health care services, residing or renting property, standing for public or private office, and provision of insurance (unless based on actuarial studies).  
The requirement for HIV testing as a pre-requisite for obtaining employment or accessing health care or education is also prohibited, a statement issued after the Cabinet meet said.  
The Bill requires that “no person shall be compelled to disclose his HIV status except with his informed consent, and if required by a court order”.  
Establishments keeping records of information of HIV positive persons shall adopt data protection measures.  
According to the proposal, every HIV infected or affected person below the age of 18 has the right to reside in a shared household and enjoy the facilities of the household.  
The Bill prohibits any individual from publishing information or advocating feelings of hatred against HIV positive persons and those living with them.  
The Bill also provides for guardianship for minors. A person between the age of 12 and 18, who has sufficient maturity to understand and manage the affairs of his HIV or AIDS affected family shall be competent to act as a guardian of another sibling below 18 years of age. This provision will be applicable to matters relating to admission to educational establishments, operating bank accounts, managing property, care and treatment.

**Disquiet over Cauvery’s flows**

When the Cauvery Water Disputes Tribunal (CWDT) proposed the setting up of a Cauvery Management Board, it did so for very good reasons. During monsoon deficit years, the pattern of flows in the different sub-basins will not match the schedule of water deliveries worked out on the basis of normal year readings. The CMB was conceived as a body that would monitor the storage position in the Cauvery basin and the trend of rainfall, and assess the likely inflows for distribution among the States. The tribunal was emphatic in its final award: the CMB is integral to the resolution of disputes, between Tamil Nadu and Karnataka and also Tamil Nadu and Puducherry and Tamil Nadu and Kerala, over the schedule of releases for irrigation downstream. For the Central government to now oppose the setting up of the CMB, taking cover under Article 262 of the Constitution and the provisions of the Inter-State River Water Disputes Act, 1956 that forbid the Supreme Court from intervening in inter-State water disputes is little more than a streak of twisted logic. Indeed, the Section of the 1956 Act that gives the orders of tribunals set up by the government under it the same force as an order of the Supreme Court is being invoked not to strengthen the orders of the Cauvery tribunal but to subvert one of its crucial recommendations. The Supreme Court’s direction to the Centre to constitute the CMB was in keeping with the tribunal order, and not in contravention of it, as the government was trying to make it appear.  
The fact that the Centre did such a hasty U-turn on the CMB while making its submission in the Supreme Court suggests that political factors may have been at play. The Assembly election in Karnataka, where the BJP has high stakes, is less than two years away. In contrast, Tamil Nadu, where the BJP has no real base, has recently concluded its election. If there is a good legal argument against the setting up of the CMB, it is that a larger, three-judge Bench of the Supreme Court is already seized of the matter. Tamil Nadu’s plea to constitute the CMB had been clubbed along with the main appeal filed challenging the 2007 final award of the CWDT. In the short term, the Supreme Court’s acceptance of the suggestion that a “technical team” visit the Cauvery basin and report back on the ground realities seems to be the only certain way of depoliticising the dispute. But any long-term solution will necessarily have to be on the basis of the well-thought-out recommendations of the CWDT, and the mechanism provided for the sharing of waters in a year of distress.

**Paper 2 Topic: Important aspects of governance, transparency and accountability, e-governance- applications, models, successes, limitations, and potential; citizens charters, transparency & accountability and institutional and other measures.  
Certificates of Appreciation to the Ministries/ Departments for their performance in CPGRAMS**

Certificates of Appreciation were recently awarded to the Ministries/Departments based on their performance in the Centralized Public Grievance Redress and Monitoring System (CPGRAMS).  
  
From each category one Ministry/Department is selected for issue of Certificate of Appreciation based on the parameters of percentage of disposal and quality of disposal.  
A three member Committee evaluates the performance for each quarter.  
  
What is CPGRAMS?  
  
The CPGRAMS is an online web enabled application to facilitate speedy redress of public grievances as it allows for online lodging and status tracking of grievances by the citizens. The system is flexible enough to be extended to multiple levels as per the requirement of concerned Ministry/Department/ Govt. Organization for speedy forwarding and redress of grievance.  
  
With this, the Government aims to have minimum Government and maximum Governance with citizen centric approach.  
Award Scheme is expected to bring a sense of competitiveness in Ministries/ Departments to address public grievances.  
Sources: pib.

**Copy-wrongs and the invisible subsidy**

Academic publishers challenged the right of Indian students to photocopied texts. Their suit shows how much they themselves benefitted from the intellectual  
The Delhi High Court recently delivered a landmark judgement dismissing a suit jointly filed by three global academic publishing corporations and their Indian subsidiaries, Oxford University Press, Cambridge University Press, and Taylor and Francis. The suit charged a photocopy shop at the Delhi School of Economics, and its legal “employer”, the University of Delhi, with infringement of copyright because the shop was selling “course packs”, or spiral-bound compilations of photocopied extracts from books and journals that are prescribed reading materials for courses of study at the university. In a lucid judgement that is radical in the classical sense of going to the root of the issue, Justice Rajiv Sahai Endlaw held that, since copyright is a statutory right created by the law, rather than a pre-existent natural or common-law right, exceptions to this right carry the same legal weight as the right itself. When defining what constitutes infringements of copyright, the Indian Copyright Act carves out an exception for the educational use of copyrighted materials, including their reproduction “in the course of instruction.” Finding that “course packs” fall within this exception, Justice Endlaw dismissed the case. The plaintiffs have since filed an appeal against this judgement.  
  
While the law will take its own course, this case raises fundamental questions about the nature and extent of private property in an inescapably collective context like the world of scholarship and higher education. Just as we are now being asked to ponder the question — who “owns” the Indian cricket team?— this case asks us to reconsider the ownership of books and ideas produced in the intellectual commons. Four facts frame such a reconsideration. The first is that commercial academic publishing is not a commercial enterprise in the normal sense. Unlike ordinary commercial establishments, academic publishers pay almost nothing for their inputs (manuscripts), or key services (refereeing and editorial oversight), but nevertheless claim “full” ownership rights over the products they acquire from the intellectual commons. It is only because academic authors are paid salaries by their parent institutions (mostly public universities and research centres) that they gladly give away their manuscripts for lifetime royalties that are usually less than a single month’s salary. Other salaried teachers and researchers act as referees and editors, once again, for little or no payment. Yet other academics — and their students — provide a captive market, as well as free and effective forms of publicity and promotion. Commercial publishers can and have added value through their own contributions like editing, copy editing, distribution, keeping a book in print, providing differentially priced editions, but it is precisely in these areas that standards have fallen sharply in recent times, despite honourable exceptions.  
  
The second stark fact is that quality higher education is not compatible with an overzealous copyright law. University students are required to read widely, their reading lists change frequently and their numbers can never match those of school students. This is a market with a large and constantly changing range of products, but with sales volumes that cannot leverage the gigantic scale economies available for school textbooks. Buying the readings for even a single course at market prices easily adds up to tens of thousands of rupees, turning a masters’ degree into an unaffordable multi-lakh luxury. Alternatives — like licensing systems that accumulate tiny commissions from thousands of retail outlets — have proved hard to implement in advanced economies and will face insurmountable obstacles in India.  
  
The third crucial fact is the technological transformation of publishing. Academic publishing has always been more or less non-viable on strictly commercial grounds. But it originated in an era when book production was a highly skilled craft and publishers were technologically and organisationally indispensable. Today, digitisation and internet-based distribution threaten to make publishers redundant. Monopolistic pricing and predatory copyrighting have been pushed the hardest by publishers of scholarly journals, and their aggressive greed has provoked a backlash. Hit by spiralling journal subscriptions, some of the richest universities on earth have chosen to challenge commercial publishing. Established in 2011, the Coalition of Open Access Policy Institutions (COAPI) has a growing membership that includes universities like Harvard, MIT, Stanford and Columbia. An international consortium of academic libraries, Scholarly Publishing and Academic Resources Coalition (SPARC) is “working to correct imbalances in the scholarly publishing system”, and has more than 800 members on four continents. Major research funding organisations like the National Institutes of Health in the United States now require their grantees to publish only in open access journals. Similar initiatives are already underway in India and will surely gather momentum.  
  
The fourth fact is that academic publications are peripheral to the Indian Copyright Act, which is mainly concerned with mass-market, high-value intellectual property like software, films or popular music. The 2012 parliamentary debate on the amendment to the Act invoked the tragic cases of shehnai maestro Bismillah Khan and film music composer Ravi, who died in penury despite their works earning millions for unscrupulous others. With academic publications and especially journals, it is publishers and not authors who make millions from copyrights. Indeed, it is precisely because of their relevance for a public good like education that academic publications and educational use are specifically exempted by the Indian Copyright Act.  
  
Taken together, these four facts suggest that publishers may not gain much even if they succeed in their efforts to overturn the current judgement. Academic publishing has always been, and will continue to be, a low volume market with a business model based on institutional rather than individual sales. The three plaintiffs in this case are gigantic global corporations reporting healthy levels of profitability — they are not going to be bankrupted by one-room photocopy shops serving students in Indian universities. By insisting on their pound of flesh in the face of the letter and spirit of the Indian law, they are inviting attention to the conditions in which they operate and the implicit and explicit subsidies they receive from the intellectual commons. Sadly, they are also helping to obscure the larger truth that students, teachers and academic publishers are natural allies with a strong stake in each other’s well-being.

**Before he became Mahatma**

Gandhi scholars generally see his political work in South Africa (1893-1914) as but a prelude to the remarkable role he played in reshaping the politics of the Indian freedom struggle. In recent years, however, a flurry of writings on Gandhi, some authored by known South African scholars, has catapulted to the centre stage of Gandhiana his ‘racist’ attitude towards Africans and Coloured people, exclusion of this segment from the political struggles that he organised, his failure to form political alliances with all oppressed people, his sexual preferences, and his imperial patriotism. How do we begin to reconcile these insights with the widely held belief in India and abroad that Gandhi is a Mahatma?

A telling contradiction

We can follow different paths to address this contradiction in Gandhi’s thought. We can, for instance, shrug off the problem by quoting the poet Walt Whitman: “Do I contradict myself? Very well then, I contradict myself, I am vast, I contain multitudes.” Gandhi certainly contained multitudes, he held odd views on social relations, his defence of the caste system is unjustifiable, and he was eccentric to a fault. But he also had an extraordinary gift for understanding the political significance of the moment, and grasping it. He lived a life of contradictions, as we all do.

Alternatively, armed with numerous cups of tea as Munna Bhai did in the marvellous film Lage Raho Munna Bhai, we burrow into dusty volumes of his letters and writings, acknowledge he was wrong at that moment of his life, and cite him to establish self-correction in his later life. The project is tiresome but doable. Thereby we follow the French Marxist philosopher Louis Althusser, who in the 1960s pointed out an ‘epistemological break’ in Marx’s thought, and distinguished between the ‘young’ and the ‘mature’ Marx. We can accordingly speak of a ‘young’ and a ‘mature’ Gandhi.

Or we can focus on the historical context of his remarks. The Cambridge historian Quentin Skinner suggests that before we judge words spoken in the past, we must know what they signified then. In the work The Prince (1513), the Florentine philosopher Niccolò Machiavelli advises the ruler of Florence, Lorenzo de' Medici, thus. A prince, he said, must know when not to be virtuous. For these words, Machiavelli has been slammed throughout history as the teacher of evil, and as immoral for separating, as he did, ethics and politics. Prof. Skinner asks us to consider what virtue meant in 16th century Florence. At that time virtue signified either a life devoted to reflection in the Platonic sense, or a life lived in accordance with the tenets of Christian morality. Lorenzo de' Medici, destined in Machiavelli’s view to unite a fragmented and conquered Italy, needed a different set of virtues. He had to possess pagan virtues of honour, valour, and courage. Virtue held different implications in the public sphere compared to the private sphere. Consider the time Gandhi lived in settler-dominated South Africa. Dominant linguistic conventions sanctioned the use of derogatory terms for non-whites. Indians, for instance, were called coolies. Gandhi erred because he did not question a practice that violated his own understanding of what human beings are due.

Does it really matter if Gandhi statues and photographs are removed, if M.G. roads are renamed, or if our present government tries to depoliticise a politically subversive leader by designating October 2 as Swachh Bharat? Gandhi, who wielded the broom with some dexterity, would not have minded. As Munna Bhai’s inner-self manifested as Gandhi’s apparition instructs him, do all this, just keep my teachings in your heart.

At this time in Africa

But there was a time when African freedom movements drew upon Gandhi; today, nationalist Africans attack him. Therefore, none of the paths suggested above might help us to reconcile the contradiction in Gandhi’s ideas or mollify our African friends. Witness the extent of anger. In June 2016 a Gandhi statue was installed in the University of Ghana during the visit of President Pranab Mukherjee. Soon thereafter a number of academics, students, and artists demanded the removal of the statue. Last year an online campaign ‘#Ghandimustfall hashtag’ gained traction, even as his statue in Johannesburg was vandalised in April during a rally against ‘Gandhi the racist’.

This anger is understandable. There was a time when Indian leaders were committed to solidarity with other postcolonial countries. Today as Indian industrialists/entrepreneurs compete with China to appropriate land and resources in Sub-Saharan Africa, we see the rise of resentment against the new colonisers. Therefore, Gandhi, who inspired Nelson Mandela, Julius Nyerere, and Kwame Nkrumah, is now unacceptable to many Africans. The exploitation of vulnerable countries by India, an emerging power, has bred a rather bitter harvest.

We can ask why something said or done a hundred years ago still has the power to evoke offence. Arguably, a reinvented nationalism that has swept the world as ‘hatred of the other’ revisits the past to identify those who belong, and those who do not. In parts of Africa, Gandhi is clearly perceived as someone who came in from the outside, and began to mobilise an otherwise disparate community of Indians: indentured labour, Memon and Bohra merchants locally called Arabs, and other Indians against discriminatory laws. He was indifferent to the plight of African and coloured people.

But that was not his project. Gandhi entered South Africa as an inexperienced and brief-less lawyer to assist a case involving two prominent Memon traders. At that time of his life, a 24-year-old Gandhi believed that the British Empire would ensure the freedom of its subjects in an oppressive settler colony. He supported the British in the Boer war (1899-1902), and raised a unit of stretcher bearers to accompany troops to the front. He expected the British to reciprocate by protecting Indians. His hope was belied, and Gandhi the imperial patriot was transformed into Gandhi the leader who touched the hearts and minds of millions. He learnt the grammar of anti-colonial nationalism in exile, and amidst oppression, much as Irish immigrants became Fenians on American soil.

His idea of India was expansive and included all Indians wherever they may work; the fulcrum remained a territorial entity called India. In a farewell address he gave to a Gujarati audience on July 9, 1914, he said: “For me there can be no deliverance from this earthly life except in India. Anyone who seeks such deliverance must go to the sacred soil of India. For me, as for everyone else, the land of India is ‘the refuge of the afflicted.’” His project simply did not include Africans and coloured people, even though they were oppressed.

The task Nehru took up

Gandhi failed to grasp the importance of an alliance between oppressed groups. That task was taken on by his heir Jawaharlal Nehru. Nehru learnt the virtue of solidarity by participating in the ‘Congress of Oppressed Nationalities’ in Brussels in February 1927. The 1927 congress was the precursor of the Bandung Conference in 1955. In The Color Curtain, Richard Wright wrote of the 1955 Conference, which excluded the West, thus. “Only brown, black and yellow men who had long been made agonizingly self-conscious, under the rigors of colonial rule, of their race and their religion could have felt the need for such a meeting. There was something extra-political, extra-social, almost extra human about it, it smacked of tidal waves, of natural forces... And the call for the meeting had not been sounded in term of ideology. The agenda and the subject matter had been written for centuries in the blood and bones of the participants.”

Gandhi would have approved, because in his later life he came to believe that the ‘other’ is a part of ‘us’. By then African sensibilities had been wounded. Gandhi has to be faulted for this lack of understanding. Perhaps it is time for Gandhians to apologise to South Africans and atone for the ‘sins of their fathers’.

**ECONOMICS**

**Partial roll back of liquor policy in Kerala will ensure safety and boost revenues**

* In a major reversal of the liquor policy the new Left Democratic Front (LDF) government in Kerala has stalled the efforts of the previous United Front (UDF) government to move towards full prohibition. The state has now decided that it will discontinue from this year the practice of shutting down 10% of the government owned retails shops selling Indian foreign liquor.
* A freeze would mean that there would now be an average of around two dozen retail liquor shops in each district of the state, or roughly 5 retail shops in each of the 75 taluks of the state.This is a reasonable number of retail shops which would ensure that there would adequate supply of quality and safe liquor.
* It will now certainly discourage people from depending on bootleggers and other producers of spurious liquor which can take a heavy toll on the health of the consumers or perhaps cost them even their lives.
* The decision to discontinue to closing down of retail shops which will allow people to drink in the privacy of homes, while at the same time sticking on with the line of the previous government to discontinue drinking of hard liquor in public places by closing down all the liquor bars, will ensure that the easy access to drinks especially for the very young will continue to be limited.
* Drinking at home would also hopefully stop tipplers from binge drinking and reduce overall consumption.
* Moreover the decision to retain the existing number of retail liquor shops will also ensure that the further loss of excise revenue to the government coffers will be limited. This is a major gain because the almost three fourths of the Rs 8000 crore plus earned by the state government from sale of liquor came from the retail shops.
* Way forward: The government should also ensure that the retail outlets are fully equipped to handle the huge rush at the counters which force consumers to line up in long numbers for an extended time. It not only makes liquor purchase a difficult task but also reminds us of the days of the license raj when state monopolise made light consumer of interests. So it is only reasonable that the left government improve the facilities at all retail liquor outlet so that consumers can opt for the best liquors at reasonable prices.

**Black money worth Rs 65,250 crore declared under Income Tax Disclosure scheme: Arun Jaitley**

* After the first quarter of the Income Declaration Scheme ended on September 30, Finance Minister Arun Jaitley said that 64,275 declarants have collectively disclosed Rs 65, 250 crore.
* The IDS scheme had provided an opportunity to illegal income and asset holders to come clean by declaring their assets under the four-month window and pay 45 per cent tax and penalty.
* Jaitley said the IDS 2016 was “not an amnesty scheme like VDIS of 1997” as the government didn’t intend to benefit non-tax compliant vis a vis tax compliant. He also said that the outcome of IDS 2016 is a positive sign as more and more people were becoming tax compliant.

**Paper 3 Topic: Indian Economy and issues relating to planning, mobilization of resources, growth, development and employment.**Rs. 65,250 cr. mopped up via new black money window  
  
The Central Board of Direct Taxes (CBDT) has received total disclosures of Rs. 65,250 crore under the Income Disclosure Scheme, 2016 in the form of cash and other assets.  
  
A four-month window was provided under the scheme for declaring undisclosed income or black money.  
Background:  
The Income Declaration Scheme offered people with undisclosed income to declare it by paying a penal tax rate of 45% on such income. Assets specified in the declaration were exempted from Wealth tax.  
These declarations also enjoyed immunity from prosecution under the IT Act, Wealth Tax Act and the Benami Transactions (Prohibition) Act, 1988.  
Sources: the hindu.  
**rich haul**  
Black money scheme brings in more than expected. In long run, streamline tax system to ensure compliance.

many within the government and outside it expected such a massive haul — an income disclosure of Rs 65,250 crore during June-September — from the black money declaration scheme that closed midnight Friday. A concerted push by the taxman in the last fortnight of the scheme seems to have worked, yielding 64,275 declarations. This works out to an average of a little over Rs 1 crore per disclosure. The government will eventually collect Rs 29,362 crore — around 0.25 per cent of the GDP — in tax from the scheme, which Union Finance Minister Arun Jaitley said would be used towards public welfare.  
While the government will claim the IDS cannot be likened to tax amnesty because the 45 per cent tax on income disclosed includes a penalty component, such schemes are fraught with a moral hazard. In fact, way back in 1997, following the VDIS and public interest litigation, the government had committed to the Supreme Court there would not be any more tax amnesty schemes. Such schemes are seen to be corrosive and warped because they tell the honest taxpayer that someone else may not pay tax for years or launder money and get away with it by paying a minor penalty on undisclosed income at a later date. The other issue relates to the confidentiality of information on the declarations. Having achieved more than what it asked for, it is hoped the government now keeps the information secure. Now that the tax department has the details, it is possible for it to verify the declarants’ annual returns regularly. But if the taxman randomly knocks at the declarants’ doors, it will only serve to erode the taxpayer’s confidence in the government. Further, it is also not entirely impossible that convincing applications and public interest litigation are filed before Information Commissioners and the courts respectively, demanding that such information be made public. This is the flip side of any income disclosure scheme.  
It is also true that evading tax will become more and more difficult. The Goods and Services Tax will bring all elements of a business into the tax net. In India, tax evasion is rife in sectors such as real estate, jewellery and in the export-import businesses. It is also a fact that many enterprises are set up within households, there is often no distinction between a household and an enterprise. A mechanism in the finance ministry where the direct and indirect tax departments collaborate and share information on income declared and taxes paid will go a long way in ensuring greater compliance. At the end of the day, a combination of moderate tax rates, robust mechanisms to track business activity and capture income data and incentives for voluntary compliance, is the only sustainable way to avoid the generation of black money.

**Did the Income Disclosure Scheme hit the mark?**While the government certainly deserves to be congratulated on achieving a commendable level of value of declarations, one needs to understand the impact of the means to achieve these figures, the objectives of the scheme, and whether there are any lessons to be learnt from the response

The government has announced that declarations of undisclosed income of Rs65,250 crore have been received under the recently concluded Income Disclosure Scheme (IDS), 2016.  
  
This is certainly far higher than the black money disclosed under any earlier amnesty scheme, even though this scheme did not offer any concession in tax, and also levied a surcharge and penalty of 15% over the existing tax rate of 30%.  
  
The declarations would yield a tax collection of Rs29,363 crore over the next 12 months—half in financial year 2016-17, and half in the following year. In that sense, the government claims that the scheme has been successful.  
  
Various reasons have been cited for this success: the drive to widely publicise the scheme through meetings addressed by senior tax officials, letters sent to various individuals by the tax department regarding information that it possessed about high-value transactions where the permanent account number (PAN) was not quoted, the targeting of persons who had indulged in apparently fraudulent purchase and sale of penny stocks and those who had given bogus donations to certain charitable institutions, and surveys carried out on various businesses indulging in cash transactions, such as jewellers, builders and restaurants and other food vendors.  
  
While the government certainly deserves to be congratulated on achieving a commendable level of value of declarations, one needs to understand the impact of the means to achieve these figures, the objectives of the scheme, and whether there are any lessons to be learnt from the response. The objective of the scheme was really to flush out black money, and use the taxes from such schemes to boost government finances.  
  
In cases where the government already had information about high-value transactions, bogus purchase and sale of penny stocks and bogus donations, a proper follow-up by the tax authorities would possibly have yielded results in the form of additions to income, if not in the current year, but at least in a subsequent year. In that sense, declarations made on this count have achieved certainty of tax collections to the government (since the matters could have been fought in appeals otherwise in the normal course), and only brought forward the payment of taxes to an earlier year, which would anyway otherwise have been collected.  
  
Such declarations would therefore have the effect of reducing tax collections in subsequent years.  
  
In cases of survey, one hears of targeted businesses pressurised to make declarations, and warned of further action in case of failure to do so. Declarations have been made fearing further disruption of business. One hears of certain cases where businesses have made higher declarations than warranted, fearing reprisal in the event of non-compliance.  
  
Such action is certainly justified in the case of tax evaders, who have been under-declaring their incomes. But the question that begs an answer is: if tax officials are aware that certain businesses are following tax evasion practices, what stops them from targeting such businesses in the normal course, even in the absence of a declaration scheme, and reducing the generation of black money?  
  
A third category of declarations, which seems to be quite significant, is cases where taxpayers have been threatened with additions to their ongoing assessments, unless they declare such amounts under the disclosure scheme for an earlier year. Taxpayers agreed to make such declarations, since the difference between the amount payable under the scheme, as against the tax, interest, penalty and cost of litigation under the normal course of assessment would have been almost the same, particularly if one factors in the fact that payments under the scheme are staggered over the next 12 months. One understands that a significant amount of declarations have been made under these circumstances. If that is so, it would have an immediate negative impact on the tax collections for the current financial year, since the assessments would otherwise have been completed by December 2016, with additions made in respect of such items. Such declarations have, therefore, merely resulted in a shift of tax collection from the normal assessment to the disclosure scheme.  
  
Further, such additions do not involve black money in most cases, but relate to disputed claims for expenditure or disputed items of income.  
  
The real issue is whether the scheme has met the objective of curbing the flow of black money. As discussed, while a significant part of the declarations may have resulted in flushing out black money, there is also a fairly large part that does not really involve black money. What is more important for the government is to ensure that it takes measures to strike at the very root of generation of black money. It is a well-known fact that political pay-offs, elections and corruption in government departments are significant generators of black money. Agricultural income continues to be a simple method of conversion of illicit money into disclosed wealth. Will the government now take steps to curb these black money-generation and conversion mechanisms? That will be the true test of its success in its war on black money, not just the value of declarations under the income disclosure scheme.

**Amnesty by another name**

The Income Declaration Scheme has garnered only a minuscule amount of black money. The big fish have got away.

The Income Declaration Scheme (IDS) announced in the 2016-17 budget closed on September 30, after remaining open since June 1. The finance ministry has announced that 64,275 people have come forward to declare Rs 65,250 crore of black money. This is the largest amount declared as black money in the history of Indian taxation. Naturally, the government claims this to be a big achievement, more so since the response in the first three months was tepid.  
The average amount of black income per declaration is about Rs one crore. This is indeed low when there is daily news about people being caught with hundreds of crores of rupees of black incomes. It is likely that either the big earners of black incomes have not come forward or declared a negligible part of their black money. It is reported that the income tax officers pressurised people under their charge to make declarations in the last three weeks. So, either they coerced the small fries, or the big fellows declared a miniscule amount. Also, many of the black income earners do not pay any tax. So they do not come under any income tax circle and, therefore, would not have been under any pressure.  
The last disclosure scheme was announced in 1997 — the Voluntary Disclosure of Income Scheme. Under it Rs 33,000 crore was declared and tax of about Rs 10,000 crore was collected. The 2016 scheme is also a “voluntary” programme, even though it is not called that. The 1997 scheme was called an amnesty scheme because of the low tax that had to be paid. But this time, it is not referred to as an amnesty because a higher rate of tax is being charged. The government had also given an undertaking to the Supreme Court in 1997 that it would not initiate any more amnesty schemes. The reason being that an amnesty scheme is unfair to the honest tax payers while those evading taxation get a concession for declaring their past income.

t the IDS is also an amnesty scheme because the penalty charged under it is less than what was being charged for tax evasion before the scheme was launched. Before June 2016, if a person’s income was found to be black, the penalty was 100 per cent to 300 per cent of the tax evaded. Since the tax rate is 30 per cent, the penalty worked out to 30 per cent to 90 per cent of the income evaded; under the IDS, the penalty is 15 per cent of the income. In this sense, the IDS runs counter to the government’s commitment to the Supreme Court in 1997.  
The comparison of the 1997 and the 2016 schemes does not show the latter in a favourable light. This author estimates the current size of the black economy at 60 per cent of the GDP; at current prices, it would be Rs 90 lakh crore in 2016-17. Thus, what has been declared is roughly 0.7 per cent of the black income generated this year. The declarations under the 1997 scheme was roughly five per cent of the black income generated that year.  
From the black incomes generated every year, a part is consumed and the rest saved. Over time, the accumulated savings become much larger than the annual income. For the rich, the savings from incomes are high, so the black wealth accumulated is much larger than their annual black incomes. Data suggests that only a small part of these black savings are declared under the amnesty/declaration schemes. Thus, barely 0.2-0.3 per cent of the black wealth has been declared in the 2016 scheme. The number of declarations in 1997 was over four lakh; now, surprisingly, it is a sixth of this number. The number of businesses, professionals, corrupt officials and politicians has risen over time. So, the number of people with substantial black incomes and wealth should have been several times the number in 1997. Even if it is assumed that the top one per cent of the population generates substantial black incomes, the numbers should have been close to 13 million.  
The government has announced that it would not reveal any of the data collected through the scheme to any agency; not even the CAG. This is strange since CAG is a statutory body with powers to audit the accounts of the government. It is the CAG that pointed to the various infirmities in the 1997 scheme. Giving data to the CAG does not violate any confidentiality.  
It needs to be assessed whether those declaring their black incomes are doing so correctly. They could be misdeclaring their recently purchased gold as that bought 20 years ago at one tenth the cost and thereby turning 90 per cent of their black wealth into white. Only an assessment by an independent auditor will help unearth such manipulations.  
There can be several reasons why the IDS has garnered much less than it should have. If “round tripping” can be done at five per cent to 10 per cent of the amount of the funds, why pay 45 per cent under the IDS? Further, if the government, promises not to resort to vigorous pursuit of businessmen — under “ease of doing business” — they may be under no pressure to come clean. A person who has hoarded black wealth can only be caught in a raid; such a person will not declare black wealth voluntarily unless there is a cost to not declaring. The “success” of the IDS scheme in the last three weeks also suggests that if the income tax department applies pressure, black money can be unearthed. The government seems to be trapped between unearthing black money and not applying pressure on businesses. Why this dilemma?

**Not So Clean**Swachh Bharat completes two years, but eliminating open defecation is a distant goal.

* October 2 marks the second anniversary of the Swachh Bharat Mission (SBM). Announcing a goal of eliminating open defecation by 2019 was a great idea, but now that we are 40 per cent through India’s flagship sanitation campaign, it is a good time to assess how much progress the SBM has made.
* Unfortunately, it is impossible to answer this question because the data simply do not exist. Although the Swachh Survekshan Report, released recently by the Ministry of Drinking Water and Sanitation, presents statistics claiming to report latrine use, the survey methodology is not credible. Surveyors did not ask a question that makes respondents feel comfortable saying they defecate in the open, and they did not ask about the behaviour of each individual in the household.
* Accountability Initiative recently released a budget brief tracking SBM allocations and expenditures. They find that from fiscal year 2014-2015, when the SBM started, to fiscal year 2016-2017, allocations to SBM more than tripled.
* Where is all of this money going? Sadly, most of it is going towards latrine construction, and very little towards  
  information, education, and communication (IEC), the headline for behaviour-change activities. The fraction of spending on IEC has actually fallen since the SBM started, from three per cent of total expenditure in 2014-2015 to one per cent in 2015-2016. This is troublesome given the reasons open defecation persists in rural India.
* It is now well known that “untouchability” plays an important role in explaining open defecation.
* rural Indians do not want to use the kinds of latrines that require periodic manual pit emptying, like those promoted by the Indian government.
* That many rural Indians do not want the kinds of latrines promoted by the government suggests that IEC would have to be a key part of promoting latrine use in rural India. Unfortunately, it appears that the little attention paid to IEC activities translates into very low awareness of the goals of the SBM.
* At its current rate of progress, the SBM is unlikely to achieve the elimination of open defecation.

**Market friendly**

* In line with the pension sector in the leading economies — but in opposition to the sentiments of Indian trade unions — the Employees’ Provident Fund Organisation (EPFO) is increasing its equity exposure to the stock market.
* The move would reduce the government’s subsidy burden when markets perform below par and offer better returns to pensioners at all other times.
* The EPFO had started investing 5 per cent of its incremental deposits in exchange-traded funds in August 2015. Returns of 13.24 per cent have emboldened the national manager of employees’ funds to double its commitment to the market, and invest 10 per cent or Rs 13,000 crore.
* Since government holds public money in trust, it cannot expose it to excessive risks. This is the main ground on which trade unions have opposed market exposure of pension funds.
* However, it should be noted that several safeguards are in place. While equity is innately riskier than debt, which governments have traditionally preferred, exchange-traded funds are baskets of assets like stocks, bonds and commodities in which risk is spread thin. If one constituent company falters, the performance of the rest should cushion the shock.
* Besides, the EPFO has a corpus of Rs 8 lakh crore, which will remain untouched by this development. Earnings from the corpus would offer a substantial hedge against turbulence, even if it is invested in safer instruments reflecting debt rather than equity, delivering correspondingly lower returns.
* And in the event of a market failure — there are now too many geopolitical uncertainties to rule out this possibility — the government remains the final guarantor of public pensions.
* there are several layers of protection between the provident fund investor and market volatility.
* And eventually, while working towards better market regulation and corporate governance, the EPFO may be given the option of exposing its funds directly to high-return equity.
* Growth and demographics will soon make social security a burden impossible for government to bear alone, and it must depend increasingly on markets.

**low priority called health**

* The private sector’s share in healthcare in India is an astonishing 78 per cent in urban areas and 71 per cent in rural areas; in Sri Lanka the share of the two sectors is nearly equal.
* What is more chilling is that public-funded healthcare insurance schemes in India, like the Rashtriya Swasth Beema Yojana, give more than 80 per cent of their reimbursements to the private sector. Simply put, money from public coffers is finding its way to private lockers through legitimate systems.
* Poverty caused by expenditure on health has doubled in India in the past 15 years. Out-of-pocket health expenditure in India accounted for 6.8 per cent of household resources (and 12.1 per cent of non food expenditure) in 2011-12.
* It does not need rocket science to understand that health is a vital resource for a nation. Healthy people contribute physically and intellectually to a nation’s well-being.
* Unfortunately, however, health ranks low in the priorities of our rulers. At 1.3 per cent of the GDP, public spending on healthcare in India is lower than some of the poorest countries of the world. Bhutan and Ethiopia spend more on health than we do.
* The strengthening of private healthcare at the cost of the public sector has had disastrous consequences.
* In a country like ours, where caste and economic stratification play vital roles, the public sector should be dominant in healthcare delivery.
* Increase in spending on healthcare, formulating relevant health policies (in a country where deaths due to diarrhea are more than deaths due to SARS) and making the healthcare system accountable are some of the urgent necessities. But private health providers are here to stay.

Facts for Prelims

* INDOSAN: INDOSAN is envisaged as an annual national event, that brings together all stakeholders working in sanitation government, NGOs, academicians, researchers, partner agencies, corporates on one platform for a shared vision. Bringing together all such stakeholders, will create an opportunity for collective vision, collective understanding of the key elements of the Swachh Bharat Mission programme. INDOSAN is the platform, where unfolding story of Swachh Bharat will actually happen, where each state will share their approaches most suitable to them to reach ODF. INDOSAN will discuss on all these approaches, emerging innovations, learnings are cross shared, for the benefit of all. It was recently held in New Delhi.
* Sports Sector Gets the Infrastructure Status: Sports infrastructure will be included under the Harmonized Master List of Infrastructure Subsectors. This is mainly aimed at addressing the issue of deficit of sports infrastructure in the country. The sports sector now becomes eligible for obtaining long term financial support from banks and other financial institutions on the same principle as is available to other infrastructure projects. This inclusion would encourage private investment in a public good which has socio-economic externalities in a country with young population. It will also bolster investment in sports infrastructure sector which will contribute to the economy and help in promotion of health and fitness of the people of this country as also provide opportunities for employment in the new and exciting sectors.
* ‘Nasha Mukt Bharat Andolan Yatra’: It is a nation-wide campaign to make society liquor free. It would be launched at Kanyakumari in Tamil Nadu on October 2 to mark the birth anniversary of Mahatma Gandhi.

**Anatomy Of The Urban Flood**

The code serves to absolve us of guilt. We just need to build smartphone apps to give us early warnings of nature’s mischief. In the worst case scenario, we have the favourite whipping boys — planners — to take all the blame. Neither is nature autonomous from human action, nor is there any masterplan which is free from politics and corporate interest. The fault lies in forgetting our agricultural past and ignoring climate change. It took us centuries to develop the complex systems of values assigned to lands in the agrarian settlement. These values are based on soil conditions, gradient, location relative to other geographic and geological features such as ground water, surface water, drainage patterns etc. Lands were strategically exploited for production, left fallow to recover, left unoccupied to provide buffers against the cycles of excesses of nature. Urbanisation alters this agrarian imprint with new logics of efficiency and economy of service delivery. This is why cadastral maps of an agrarian settlement show fluid zigzag boundaries of property. After land use conversion for urbanisation, the boundaries change into rigid geometric patterns. New logics of revenue categories, new processes of record maintenance, reservation of land parcels for new purposes and installation of new infrastructure erase the agrarian birthmarks of land. Urban policy has, till now, remained oblivious to this dynamic.  
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In the 1970s, lands that served ecological functions were occupied by the poor who migrated into the city and found no housing. But in the last 20 years, many of these properties have entered the land market. With increasing pressure for land monetisation, governments and public utilities are all vying with each other to capture and convert land parcels to new uses. Ridge systems, stream paths, accumulation points in the valleys — all play critical roles in managing precipitation and drainage — have been flattened.  
The untold story of urban floods is the story of lands that were until recently variously categorised as poramboke, gochar, gomala, gaonthan, bancharai, sikham. It is the story of our cities that transport water across hundreds of miles, turn it into grey water, mix it with stormwater and banish it from view. It is the story of how not a drop of water is allowed to seep into the ground. Nor is a drop allowed to flow without obstruction. It is the story of how people with customary rights to such lands have either been excluded or turned into brokers for the rise of urban transition. Urban property owners, managers and regulators must pretend that the earth is flat, at least within the boundaries of their property. But water must follow the law of gravity and go down the slope. Thus, the Guwahati floods wash away houses on hill slopes. The Hyderabad floods inundate houses on tank beds. The Delhi floods make the airport terminal unusable. We must  
We must recentre our policy and retrain our engineers into acknowledging our agrarian past. Urbanisation is a profound geo-historic shift. We must manage it well by careful observation, data gathering over long periods of time, modelling the behaviour of nature in the altered context. We must review and revise revenue laws and rules that govern land categories and shape land use change. This requires homegrown multidisciplinary expertise and we have plenty of it.  
We can import modelling tools and sensor technologies. But we cannot import historical data. It must be generated, captured and curated. We can hire international consultants but we cannot import native intelligence. It must be affirmed and nurtured in our cities. We can borrow money from international agencies, but we must build our own resilience. With climate change induced extreme events likely to occur with greater frequency, we have little time to lose.

**Over the barrel: The life and death of the oil age**Slump in oil prices could be temporary or more long-lasting. Policymakers must plan for all scenarios.

Lower for now”, “lower for longer” or “lower forever”. These are the catchwords that summarise the current discussion on the future of oil prices. Are the current low prices a temporary blip? Will they stay at these levels for longer than the historic commodity cycle would suggest? Or is “low” now the new normal? I would caution against pegging one’s pennant on any of these masts. The oil market is riven by too many uncertainties. But I would encourage decision-makers to prepare policy responses to each of these possibilities. The price of crude oil today is less than half of what it was when Modi was sworn in as PM in May 2014. At that time it was trending above $100/ barrel. Today, it is quoted at less than $50/ barrel. The primary reason for this decline has been a mismatch between demand and supply. Demand has been sluggish because of plateaued US consumption, the recession in Europe, the slowdown of the Chinese economy and the strengthening of the dollar. In contrast, supply has been robust. The drivers have been US shale production, the decision by Saudi Arabia to forego its role as swing producer, the material increase in production from Iraq, Libya and Iran and the dumping by Wall Street of their speculative holdings. The question that people have struggled to answer is whether this mismatch reflects an inflection point or is a manifestation of historic patterns, albeit deeper and possibly more enduring.

The “lower for now” school build their argument on two pillars: One, there is currently no scalable and competitive substitute for gasoline and diesel as fuels for mobility. Therefore, oil remains a strategic commodity especially given that transportation accounts for almost 60 per cent of the current global oil demand. Two, the bulk of the relatively low-cost reserves of oil and gas are located in countries that are today in free fall. It is a matter of time before one or more of them implodes and radically disrupts the oil supply chain. The Middle East is a social and political cauldron riven by multiple geopolitical tensions. Venezuela is on the verge of a sovereign default and Nigeria and Russia face deepening internal civic unrest. A breakdown of governance in any of these countries could take a sizeable chunk of oil out of the market and convert the current situation of supply overhang into one of supply deficit. Prices would rise sharply.

Proponents of the “lower for longer” school do not disagree fundamentally with the above view. They too believe petroleum will continue to occupy a dominant share of the energy basket for the foreseeable future because of the absence of substitutes for liquid fuels for transportation. And they also accept that prices will be pushed higher because of geopolitics. The difference between the two positions lies in their assessment of the timing of this price increase. This latter group do not expect prices to rise for some time because of essentially three reasons: One, the so-called “high absorber” producer countries like Saudi Arabia, Iran, Iraq and Russia do not have the fiscal space to accept even a short-term cut in revenues. They are running huge budget deficits and therefore need to pump as much oil as is physically and technically possible. They appreciate the risks of this approach and as the recently concluded OPEC meeting last week in Algiers at which the members agreed to cut production by between 2,50,000 and 7,50,000 barrels/day revealed, they are endeavouring to avoid cutting their nose to spite their face. But OPEC is a fractured organisation and it is more than likely that when it comes to distributing the cutbacks among individual members, the agreement will fall apart. And countries will revert to their maximalist positions. Further, to compound matters and this is the second factor, the lead time for bringing “shut in” production back into the market is much shorter for unconventionals (shale) than for conventionals. Thus, in the event prices did move into the $55-$60/bbl range, the 7,50,000 bbls/day of production in the US that has been “shut in” over the past year could be quickly brought back into production as a countervailing check on prices. The third reason is demand. Proponents of this school argue that there has been a structural improvement in the efficiency of oil usage and that whilst the absolute consumption of oil will increase as countries transition towards a more energy intensive developmental model, the rate of growth of demand will be lower than historical trends. Demand will not be as powerful a force as it has been in the past.

Just over a hundred years ago, Winston Churchill, as First Lord of the Admiralty, ordered British Naval ships to use oil rather than coal. This one decision heralded the “oil age”. Coal remained an important part of the energy basket but its market share declined through the 20th century. Advocates of the “lower forever” scenario believe that oil is now at a similar inflection point. They argue that there are credible, competitive and scalable alternatives to liquid fuels for transport around the corner. Already, the US Navy and jet aircraft are experimenting with biofuels, LNG and CNG powered long-distance trucks are on the roads in the US and China and electric vehicles are on an exponential growth curve. Further, solar and wind energy costs have dropped sharply and countries and companies are now investing hugely in upgrading and balancing the transmission and distribution infrastructure to enable renewable energy to scale beyond distributed coverage. And finally, with the signing of COP 21 in Paris and the strengthening of environmental activism, there is strong regulatory and public pressure against fossil fuels. These three forces mark the end of the oil era. Prices will consequently remain at or below their current levels forever.  
Oil will no doubt continue to flow within the interstices of national economies but decision-makers would be well advised to contemplate policy against the backdrop of one or a combination of the above scenarios.

**Paper 3 Topic: Indian Economy and issues relating to planning, mobilization of resources, growth, development and employment.  
  
Centre accepts pay panel recommendation on promotion**  
The Union government has accepted the recommendation of the 7th Pay Commission on Modified Assured Career Progression (MACP) for Central employees.  
Key facts:  
  
There shall be three financial upgradations under the assured promotion scheme counted from the direct entry grade on completion of 10, 20 and 30 years services respectively or 10 years of continuous service in the same level in Pay Matrix, whichever is earlier. This would ensure one minimum promotion for every 10 years till 30 years of service.  
MACP envisages mere placement in the immediate next higher level in the Pay Matrix. Thus in certain cases where regular promotion is not between two successive levels in the Pay Matrix, it will be different than what is available at the time of regular promotion. In such cases, the higher level in the Pay Matrix attached to the next promotion post in the hierarchy of the concerned cadre/organisation will be given only at the time of regular promotion.  
  
  
Background:  
  
The Modified Assured Career Progression Scheme was originally introduced in 2008 following the recommendations of the Sixth Pay Commission.  
  
  
**Bolstering growth amid risk**s

The Monetary Policy Committee’s decision, at its maiden meeting, to cut the benchmark repurchase (repo) rate by 25 basis points held no surprise for markets. What had been on watch was the language of the policy statement, the extent of consensus in the committee and the manner in which the new Reserve Bank of India Governor and chairman of the MPC, Urjit Patel, presented the central bank’s positions. Articulating the main concern that informed the newly constituted rate-setting panel’s rationale for reducing interest rates, Mr. Patel said the global demand environment was clearly looking far bleaker than previously anticipated, with the forecast for world economic growth set to be downgraded further. The focus, he signalled, therefore needs to remain on supporting the domestic economy through an accommodative monetary stance. That the MPC has opted to lay primacy on ‘supporting growth’ while keeping its sights firmly trained on the RBI’s central remit to target a medium-term retail inflation objective of 4 per cent, within a band of plus/minus 2 per cent, bodes well. Decision-making by committee is never easy, and given the short time the MPC had since its constitution last month, the lucidity of the policy statement shows its six members have hit the ground running. While the minutes of the meeting — that will reveal each member’s arguments — will become available on October 18, all six voted for the rate cut. The decision reflects the broad consensus that the risks to growth from global uncertainty and financial markets volatility remain high, especially ahead of the U.S. presidential election, and that a rate stimulus was warranted given the recent slowing in retail inflation.  
Even as it expects an improvement in the outlook for food inflation on the back of increased sowing and supply management measures undertaken by the government, the MPC has been cautious in flagging the risks to the trajectory for price gains. In the panel’s opinion, the main factors that could play a contributory role in furthering a fresh ‘cost spiral’ would be the higher house rent allowances mandated by the Seventh Pay Commission, the increase in minimum wages and the possible spillovers through minimum support prices. Multiple factors augur well for the outlook for both the industrial and services sectors. But the worsening trade demand could offset the gross value added (GVA) momentum, the MPC noted, while retaining the RBI’s GVA growth forecast of 7.6 per cent. That the panel has made a decisive start to rate-setting through deliberation is clear; how it weathers harsher domestic and external challenges, should they emerge, remains to be seen.

**Some problems are genuine, but BCCI’s brinkmanship could**

If it all comes crashing down around the ears on Thursday, it will be as much for what the board did as for what it didn’t do.  
There might be a philosophical insight to be gained from an immoveable body meeting an irresistible force. But when the Board of Control for Cricket in India (BCCI) is the body, and the Supreme Court is the force, the fallout for cricket could be dire.  
The BCCI has been ignoring the Supreme Court deadlines with an arrant disregard for propriety or legality. The Supreme Court has been getting into the nuts and bolts of administration and laying itself open to charges of judicial overreach. The cricket board has some genuine issues but in choosing hubris over humility, it has thrown the system into turmoil.  
The BCCI’s brinkmanship will end unhappily if the Supreme Court decides tomorrow to appoint administrators to run cricket, replacing President Anurag Thakur and other elected office-bearers. Ironically, the upheaval takes place even as India becomes the No. 1 Test team. Are the Supreme Court rulings harsh? Yes, a few are. Does the BCCI deserve another chance? Perhaps it does, but its recent record has not been encouraging.  
The BCCI has no one to blame but itself. When it was still possible to explain its position to the Lodha Committee, it assumed a divine right to administration. The combination of inaction and arrogance upset the Committee.  
Delaying tactics backfires  
The BCCI didn’t seem to realise just how serious the matter, or indeed the Supreme Court, was. It showed amazing faith in its delaying tactics. Thakur’s predecessors had already messed it up with the Supreme Court earlier, thanks to a similar attitude.  
Then the BCCI appointed Justice Markandey Katju, the maverick former Supreme Court judge, as head of its legal committee. “The Supreme Court has indulged in judicial legislation,” he said, indicating that the ruling was unconstitutional.  
If the board’s idea was to stir things up, it succeeded. From a matter of sports administration, the saga took on the contours of an old-fashioned ego clash. And when the Supreme Court told the BCCI: “Fall in line or else we will make you fall in line,” there was no doubt which side had the better weapons.  
Proxy war?  
Why did the BCCI create a crisis by pushing the Supreme Court into a place from where it can give only one ruling on Thursday? It is difficult to imagine a sporting body taking on the highest court in the land so rashly without the backing of higher powers. This might just be a proxy war being fought on behalf of larger institutions. Perhaps the BCCI is a pawn in a larger game.  
Neither side has access to a sports law since politicians of all hues have consistently opposed it. The National Sports Development Bill has been hanging fire for years now. Ironically, one way out for the BCCI might be to get such a law passed. There is a hint in the Supreme Court’s original order. It had rejected Lodha’s recommendation to bring the BCCI under the Right to Information Act (RTI), saying that that was a matter for the legislature.  
The BCCI has been unhappy over the selective leaks that have painted its officials in poor light. The hostility is at fever pitch, and the steadily closing window of opportunity seems to be a breath away from being fully shut now. The one avenue open to the BCCI might be to ditch hubris for humility, and beg the Supreme Court for time to explain to the Lodha Committee why certain things cannot be done.  
There is no doubt that the BCCI needed reform. When the courts entered the picture following charges of spot fixing in the IPL, the BCCI under N. Srinivasan was given ample opportunity to self-regulate. But it decided to brazen it out.  
However, in ruling on every little thing, the Supreme Court might have been hasty. Whatever the merits of a three-man selection committee, the matter is best left to the governing body.  
The 15-day break after the IPL means that the Champions Trophy in England might suffer. That is a call the BCCI should make in consultation with the players’ association.  
Justice must be tempered with pragmatism  
While the focus on Northeast cricket is welcome, justice must be tempered with pragmatism. It is too early for individual states which lack proper systems to play in the Ranji Trophy. Perhaps a solution is to have a combined north east team initially.  
The BCCI’s argument is that in no other sphere of activity is there a “cooling off “ period (three years followed by a cooling off period of three and a maximum of nine years in office). But the three-year period could be stretched to five with a cooling off period and another five-year stint.  
The board is unhappy that it has to fund the Players’ Association. But it is a necessary body, and fees collected can be a percentage of the players’ earnings. That will guarantee financial independence from the BCCI.  
Sports bodies need to be autonomous. The BCCI, rich, arrogant, opaque, feudalistic, known as an international bully, operating with a remarkable lack of accountability over the years, is still the best run and most efficient sports body in the country.  
The Supreme Court has given it a long rope, and the BCCI has chosen to play tug-of-war. If it all comes crashing down around the ears tomorrow, it will be as much for what the board did as for what it didn’t do.

**Message to WhatsApp**While India awaits a privacy regulator, an intelligent and vocal user base should assert itself.

When the free instant messaging service WhatsApp was acquired by Facebook in 2014 for $19.3 billion, its founder Jan Koum had assured users that their data would not be shared with the social media giant. Two years later, the company sought permission from users, via a slightly confusing electronic form, for the right to share data. India is one of the nations where the volte face has caused alarm. The Delhi High Court has directed WhatsApp to delete user data collected for sharing from users in India upto September 25. However, it is not clear how compliance will be secured, since India does not have a regulatory framework for instant messaging services.  
Privacy law which covers over the top services, and a regulator to oversee it, are clearly needed in India. Equally, the limits of a purely legalistic approach are patently obvious. These are services in a marketplace, which is an arbiter itself. Companies are badly hurt by negative sentiment. If people find service terms and conditions unacceptable, they choose alternatives. If WhatApp is perceived to be taking advantage of users, competing apps like Telegram would benefit, taking away market share. A regulator must step in when a player tries to leverage size and market dominance to seek a monopoly. Even in such situations, the market may suss out the game on its own.  
Services like WhatsApp should indeed be brought under a regulator and investigated to see if evolving policies are adequately explained. However, there is no such thing as a free lunch. Services can be offered for free only by commodifying and monetising the user, and this may involve the dilution of privacy. WhatsApp is great for sharing silly jokes and those exasperating good morning messages. But it would be a daft idea to hold a board meeting using it, where algorithmic data mining would be deeply problematic. While a regulatory framework is awaited, concerned people should graduate their use of such services intelligently and make their opinions patent.

**Paper 1 Topic: Modern Indian history from about the middle of the eighteenth century until the present- significant events, personalities, issues.  
  
PM remembers Shyamji Krishna Varma on his birth anniversary**Birth anniversary of Shyamji Krishna Varma was celebrated on 4th October.  
  
Shyamji Krishna varma was an Indian revolutionary fighter, lawyer and journalist.  
He founded the Indian Home Rule Society, India House and The Indian Sociologist in London.  
An admirer of Dayanand Saraswati’s approach of cultural nationalism, and of Herbert Spencer, Krishna Varma believed in Spencer’s dictum: “Resistance to aggression is not simply justified, but imperative”.  
The India House and The Indian Sociologist rapidly developed as an organised meeting point for radical nationalists among Indian students in Britain at the time and one of the most prominent centres for revolutionary Indian nationalism outside India. Most famous among the members of this organisation was Veer Savarkar.  
Shyamji Krishan was also an admirer of Lokmanya Tilak and supported him during the Age of Consent bill controversy of 1890. However, he rejected the petitioning, praying, protesting, cooperating and collaborating policy of the Congress Party.  
Sources: the hindu

**Sagar Port Project**  
The Central Government has given in principle approval to a grant of Rs. 515 crores to make the development of the proposed Sagar Port project in West Bengal financially viable.sagar-port-project  
A Special Purpose Vehicle, Bhor Sagar Port Limited (BSPL) has been incorporated for the implementation of the project, with Kolkata Port Trust holding 74% equity and the Government of West Bengal holding 26% equity.  
A road-cum-rail bridge is proposed over the river Muriganga to connect the Sagar island to the mainland.  
The connectivity of this road-cum-rail bridge to the National Highways network and the railway network has also been taken up in right earnest. The Ministry of Road Transport and Highways has agreed, in- principle, to take up widening of NH-117 to a four-lane road from Kakdwip to Joka and up to the rail-cum-road bridge to the Sagar Island.  
Where is it?  
  
Sagar island is an island in the Ganges delta, lying on the continental shelf of Bay of Bengal about 100 km south of Kolkata.  
Who administers it? It comes under South 24 Parganas District in West Bengal. It is governed by the State government of West Bengal.

**No proof required: A data dependent MPC**In making the decision to cut the repo rate by 25 bps, the Monetary Policy Committee was neither dovish, nor hawkish, just pragmatic  
The recent decision by the Monetary Policy Committee (MPC) to lower the repo rate by 25 bps to 6.25 per cent has been met with criticism and scepticism. Some analysts have gone as far as to assert that there has been faulty judgment.  
  
This criticism and commentary is all part of a healthy democratic system. Also fair is that some critics (like myself) find fault with the criticism of the critics, and even find it unfair. As it happens, I also think that the RBI-MPC is unnecessarily using some very faulty tools. Just to put my cards on the table, I believe that the MPC and RBI Governor Urjit Patel have reached the best decision that was possible with the data they had. Historically, except for occasional lapses, the RBI has been a data dependent institution, and it is encouraging to see that the tradition is being strongly reinforced by the MPC.  
  
Questioning of the MPC decision has proceeded along the following lines: First, and most importantly, that the inflation rate is too high to warrant a rate cut. The last four year-on-year headline inflation numbers have been as follows: 5.5 (April 2016), 5.8, 6.1 and 5.1 per cent (August 2016). The target of the RBI is five per cent for March 2017. So how can the MPC cut rates now, and that also with a unanimous vote?  
Surely, and unlike Raghuram Rajan, the MPC is giving in to political pressure (Ministry of Finance) and major corporates (who always want interest rates to be cut). Further, the MPC is emphasising growth over inflation, that is, they have all turned doves.  
  
It is likely that the unfortunate manner in which Rajan was not reappointed is colouring perceptions and interpretations of many commentators. For the fact remains that rather than being different than Rajan, the MPC (and Patel and RBI) are doing what Rajan would have done. How do we know that?  
  
We know that from the second criticism by the “experts”. A popular conclusion of the experts is that the RBI has softened because it has reduced the real policy rate range from 1.5-2 per cent to 1.25 percent, that is the RBI was now targeting a 1.25 percentage points gap between the repo rate and CPI inflation. This was articulated by MPC RBI member Michael Patra in the press conference following the MPC decision.  
So the experts are right in stating that the real policy rate is now 1.25 per cent.  
  
But the experts are very wrong in deducing that this is a change in policy. Look at the following headline after the June policy meeting of the RBI under Rajan: “Will have room to cut rates if inflation stays at 5 per cent” (IE, June 9). The article goes on to quote Rajan: “If we get confident of achieving five per cent inflation target by March 2017, then we will get more space to cut.” What the RBI and MPC did on October 4 was a continuation of the RBI policy. There has been enough data on food prices, especially of pulses (and fruits and vegetables), to suggest that the next six-month course of such prices is at best stable at current levels, and likely to be lower because of the influence of good weather and increased acreage, and prospects of higher yields, for an “inflation-elastic” crop like pulses.  
  
  
  
This assessment, and forecast, has no relationship with being dovish, or looking at growth more than inflation, or giving in to the demands of industrialists and/or the Ministry of Finance. Indeed, if the MPC members had not unanimously agreed to cut rates, they would likely have had egg (and worse) on their faces next week when the CPI data for September is scheduled to be released — a figure around 4.3 per cent year-on-year headline inflation will not be entirely surprising. The simple point is all of us are rightly expecting the MPC to be responsible — and when they do act responsibly, by cutting rates in the face of considerable evidence, let us not besmirch their honour, or intelligence, by attributing to them false motives.  
  
But the MPC has room to improve. A central feature of all inflation targeting regimes, and all bankers, and all economists, is that the key to lowering inflation rates is the lowering of inflation expectations. In the case of already low inflation, the goal is to keep expectations stable. And as we now know for some developed economies (Japan, Europe), the key to successful monetary policy is to raise inflationary expectations.  
In the first MPC-RBI policy statement, one finds the following statement on inflationary expectations, and how important and influential they are: “Households reacted to the recent hardening of food inflation adaptively and raised their inflation expectations in the September 2016 round of the Reserve Bank’s inflation expectations survey of households.”  
  
Given the importance of inflationary expectations, one would think, and believe, that central bankers would strive to make sure that they measure properly such expectations. Or at least measure them to the best of their ability. It is not clear that the RBI has ever fulfilled this mandate. In January 2015, at the beginning of this rate-cut cycle, the RBI cited the results of its most recent inflation expectation survey (RBI-IES, December 2015), as supportive of a rate cut (25 bps from 8 to 7.75 per cent). This survey had shown a decline in one year forward expectations to 9.3 per cent from 13.5 per cent at the end of the previous quarter (September 2015). In my commentary on this rate cut (Indian Express, “Why ignorance is not bliss”, January 17, 2015) I had this to say: “Since when was high expectation of inflation of nine per cent low enough to warrant a rate cut? I fully agree that interest rates should be cut — but not because a junk RBI survey shows a decline in inflation expectations to a high nine per cent level. Better to junk junk than to offer it as an explanation — it makes all of us look bad”.  
  
One and a half years later, and with an MPC in place, there is no change in this one bad habit of the RBI — the bad habit of using a junk survey, a junk result, to justify its otherwise very sound reasoning. Don’t take my word, or believe me, but do peruse the chart. There are two lines in the chart — actual year-on-year CPI inflation for each quarter, and the year ago forward expectation for the same quarter. For example, at the time Rajan cited the junk survey in January 2015, year-on-year inflation in 2014Q4 was 4.1 per cent. The forecast of the junk survey for this same quarter was 13.5 per cent!  
  
Note also that there is no learning by doing on the part of the survey respondents. As inflation has declined, the forecast error (gap between forecast and actual) has widened, and to a near double-digit magnitude. It is intellectually embarrassing to even report these data, let alone use it.  
  
The MPC is a new and progressive institution. The reasoning behind the vote, and the vote, of each MPC member will be made public 14 days after each meeting. We already know that it was a unanimous vote to cut. Let us hope that none of the members cite junk inflationary expectations.

**GST: now for some small tricky steps**  
  
The near unanimous passage of the constitutional amendment bill for the goods and services tax (GST), followed by its ratification by 17 state legislatures till now, should warm the hearts of economic reformers, and even of those who were cynical about the ability of the Indian political class to rise above the usual myopia. However, many important challenges remain. They need to be faced with courage and maturity as the states continue the process of discussion and ratification.  
  
While the discussions in state legislatures are likely to revolve around the issue of the revenue neutral rate, and the magnitude of loss or gain that is likely to ensue upon the implementation of GST, there are a couple of points to be made. One, the revenue neutral rate is really a very static way of looking at what can be a Grand Bargain, and a game-changer for the Indian economy at large. After all, the whole point is that the reform will unleash such positive forces of growth that the actual buoyancy in tax revenue for both Central and state governments is likely to be far higher than the current static calculations. In other words, a lower actual rate than the computed revenue neutral rate should be acceptable once the impact on future economic growth is taken into account.  
  
Of course, the growth dividend is unlikely to be available overnight. There is likely to be a lag as teething troubles are sorted out. Yet, a temporary revenue loss is still worth taking in one’s stride. It can be thought of as an investment in a reform that will pay for itself sooner rather than later. In fact, since the Central government has promised a five-year compensation mechanism, the states have little to lose by accepting a lower tax rate. They ought not to hold out for a higher rate for state GST.  
  
Indeed, I propose that instead of a revenue neutral rate, which is the focus of a lot of debate, the states should really be concerned with the budget neutral rate. After all, revenue available is merely a notional amount available for use by the government for providing public goods and services; it is actually the net amount available for expenditure through the budget that is the key and it is this notion that one is referring to when one talks of budget neutrality.  
  
The GST-able component of revenue will increase in an arithmetic sense given the higher rate but there is also the expenditure component that is spent on goods and services that would then be subjected to the higher rate. The net amount available for expending autonomously will thus be less. The argument here is clearly for preservation of such a net amount and on the premise that the real power with the (state) government is not really to raise revenue per se but rather the power to incur expenditure for provision of goods and services. Once again, we reach the conclusion that the states should give up their stance for a higher rate arising out of revenue neutral rate calculations, especially in the context of the assured compensation caveat.  
  
In the case of states such as Maharashtra, there is the ticklish issue of what to do about the significant tax revenue that will have to be passed on to the urban local bodies—specifically Mumbai—when existing taxes such as octroi and local body tax (LBT) are subsumed under GST. Maharashtra is historically not known for showing alacrity in passing on externally allocated funds to cities. The money allocated to it by the Finance Commission is a case in point. The state government has never devolved any funds as per its State Finance Commission recommendations. Whereas political parties on the whole have shown little concern about this lack of decentralization in general, it is likely to become a rather sensitive issue if some political party believes that it would gain power at the local level and be short-changed by the state government.  
  
One way to address this problem would be having a legal contract between the state government and the municipal corporation to define the specific amounts and dates when GST revenue is passed on to city governments. Such a contract can be implemented under the supervision of the Central government for ample sanctity and comfort. This third-party involvement could lend credence to such a contract especially in the context of the historical experience in the state, where there has been no sanctity attached to the notion of devolution (untied grants) from the state to the local bodies.  
  
The modality could be to use the Finance Commission fund via the State Finance Commission route, so that such a transfer to the local bodies in lieu of octroi and LBT could be done outside the normal payment schematics and prior to the funds reaching the consolidated fund of the state. In doing so, computerized banking networks could be used for speed and efficiency. Such an arrangement could then be achieved, perhaps, through an executive order without the legislative voting, keeping to the level of financial transaction modality. The other way would be to pass a generic Bill, complete with procedures and rules that would ensure due compensation to all the urban local bodies, and should provide enough comfort, but at the cost of all the transaction costs of formulating and passing a legislative Bill.  
  
In any case the small tricky steps must be overcome efficiently and with ingenuity so that the Grand Bargain that is promised for all stakeholders is not further stalled.

**Government of India should not Make in India**  
India is recording historically high investments in technology-oriented industries such as telecom and over the top (OTT) services that ride on telecom networks such as financial technology and e-commerce.  
  
The latest infusion of Rs47,700 crore by UK-based telecom giant Vodafone Plc. into its Indian arm is indicative of the fact that the Indian market remains much coveted despite the headwinds to global growth. Manufacturing investments are also targeting the tech-hungry Indian consumer.  
  
Chinese telecom giant Huawei will begin manufacturing smart phones in India this year, the 40th such manufacturing investment in the country in the past two years alone. With such investments and parliamentary consensus on the GST, one may be tempted to conclude that ‘Make in India’ is on track. This may be premature.  
  
India’s transition from an agricultural economy to a service economy has posed a conceptual challenge for many who see industrialization as the only way to create jobs. Industrialization requires best-in-class infrastructure, cheap energy and a skilled workforce, all impossible prerequisites to fulfil in the short or medium term. But the ‘digital economy’ offers a way out.  
  
While productivity gains from automation and digitisation have driven industrial growth in advanced countries over previous decades, their effects are not fully felt here.  
  
The digital economy can potentially mobilise millions of Indians, constituting the ‘informal workforce’, bringing them within a more productive fold. India’s biggest challenge is also its best opportunity: it has a large, young and untrained workforce that can intuitively understand applied technology, if given early exposure.  
  
In fact, India can extract greater relative gains from the digital economy than its advanced country counterparts. Real income growth in advanced countries requires sustained and fundamental innovation whereas India can harness incremental innovation towards higher rates of growth (mostly owing to a favourable demographic).  
  
But continued innovation support through private sector investments is not inevitable. Many policymakers mistakenly believe that India cannot be ignored as an investment destination. Nothing is inevitable.  
  
Conversely, Make in India’s greatest threat is the ubiquitous government-run enterprise itself. And this is borne out in a number of technology-oriented industries; which is worrying as successive governments have first created favourable conditions for investments and then jeopardised them.  
  
For instance, the telecom industry, often cited as an example of successful liberalization, finds itself at a crossroads. It is dependent on falling voice call revenues despite enough global precedent to show that data revenues are the future. The industry lacks the bandwidth to deliver affordable data.  
  
And there is policy inertia to address this, partly due to the existence of BSNL. Policymakers have hesitated from undertaking comprehensive reforms around key challenges such as Right of Way regulations, hoping that BSNL’s networks will save the day. And BSNL has not delivered the goods: the quality of its Internet infrastructure and service ethic are reminiscent of the pre-liberalisation era.  
  
Instead of harnessing a well-designed ‘ring network’ as was originally conceptualised in ‘BharatNet’, India has to settle for optic fibre cables thrown on electricity poles, barely resilient enough to withstand a windy day.  
  
Another competitive technology industry, broadcasting, is another example. While most advanced countries have public broadcasters, few have created legacy issues as profound as Prasar Bharati has here.  
  
The private broadcasting industry has been haemorrhaging money owing to high cost of ‘carriage’ and regulatory restrictions on deriving more revenues. Prasar Bharati has been on the wrong side of both these issues—not readily relinquishing spectrum to private operators which could help lower carriage costs, and forcing private operators to circumscribe their lifeline advertising revenues by applying Mandatory Sharing regulations on high value content such as sports broadcasts. Policymakers have conflated national interest with consumer choice.  
  
The result is that broadcasting investments have been muted over the past decade despite progressive liberalization of FDI caps. The larger lesson to draw is that governments should not be both regulators and competitors. This is not the easiest pill to swallow, particularly when sentimentality accompanies the notion of government-run enterprise.  
  
The introduction of RuPay cards by the National Payment Corporation of India, which is heavily guided by the Reserve Bank of India, indicates that the government is tempted to enter markets to disrupt perceived monopolies even in the digital economy.  
  
Ironically, India is a party to the US-led dispute with China at the WTO on the Chinese variant of RuPay, called UnionPay. India’s approach therefore is neither consistent nor wise. It is a legacy of the past, wherein the government created markets for ‘old economy’ industries such as energy and infrastructure.  
  
While public enterprises have succeeded, to an extent, in traditional industries, they are not optimized for the new economy which requires constant innovation and high standards of service delivery.  
  
The government should remain a licensor, regulator and adjudicator and let consumer choice select winners in markets where neither capital nor technology are constraints.

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**Central Banks are spreading unnecessary confusion**  
If there’s a golden rule for central bankers in the 21st century, this is it: Seek clarity and avoid uncertainty. A central bank’s target should be clear. The data it uses should be known. The analysis it conducts on that data should be comprehensible. And, certainly, politics should have nothing to do with its decisions.  
  
Yet across the world, central bankers are struggling to live up to these requirements. Instead they’re undercutting their own positions by introducing quite unnecessary confusion into policymaking.  
  
Most obviously, the US Federal Reserve continues to keep markets across the world on tenterhooks for little good reason. Several hawkish members of the Federal Open Market Committee have said recently that the ingredients are in place for a long-expected increase in interest rates. Yet the bond market reflects general disbelief that the Fed could possibly raise rates less than a week before a presidential election. (The FOMC meets next on 1-2 November)  
  
That’s unfortunate, since the data that the Fed is supposedly monitoring—jobs growth, personal consumption expenditure, inflation and so on—suggest that the US central bank should already have raised rates. If instead it waits till December to do so, it will have kept financial markets unstable and expectant for months with no clear explanation as to why.  
  
Other central banks have had their own issues. In September, the Bank of Japan switched its policy target to long-term interest rates from the rate of increase of the monetary base, continuing its role as junior partner in Prime Minister Shinzo Abe’s attempt to jolt Japan’s sluggish economy out of decades-long stagnation. Governor Haruhiko Kuroda insisted that this did not represent a “tapering” of stimulus; investors strained to believe him. The BOJ has left murky how it will respond when economic indicators evolve: Sure, the bank has a zero target for the yield on Japan’s 10-year bond, but how will that be achieved? Kuroda’s vagueness has left markets hanging.  
  
Earlier this week, the Reserve Bank of India caused similar confusion. Under Raghuram Rajan, the RBI’s previous governor, investors had become accustomed to the idea that the bank was targeting 4% inflation by March 2018. Rajan’s deputy, Urjit Patel, fully backed that target. But after taking over the RBI, Patel startled markets by refusing to restate it in his first post-Rajan policy decision on Tuesday, an effective U-turn on policy without any real explanation.  
  
The RBI also suggested that the “real” return for savers it considered desirable—the inflation-adjusted rate—should be 1.25%. Rajan had earlier said that a rate of 1.5 to 2% would be reasonable. Again, the bank provided no real explanation of the change or what it means.  
  
As a result, the RBI’s decision to cut interest rates by 25 basis points surprised many investors. The bank argued that India’s consumer price inflation had shrunk permanently, ending the long post-crisis period in which controlling runaway prices had become the RBI’s obsession. True, a good monsoon may keep food prices moderate. But lower crude oil prices may have had as big an influence on Indian consumer price inflation as the rains, if not bigger: Inflation has fallen below 6%, into the RBI’s comfort zone, largely thanks to the sustained decline in global crude prices since June 2014.  
  
No one knows where that price will go if Opec gets its act together. Yet the RBI seems to have discounted the upward shock to Indian inflation if Opec hammers out an agreement that brings the demand and supply of crude oil into balance.  
  
It’s hard not to worry that India’s new monetary policy committee, like its peers elsewhere, is focused on assisting the government’s political objective of reviving private investment, even at the cost of clear communication of the RBI’s own objectives. That fear is supported by Patel’s suggestion that the central bank—which also regulates India’s banking sector—would henceforth be more “pragmatic” in dealing with the asset quality crisis in India’s banks than it had been under Rajan, whose take-no-prisoners approach to the problem had upset some in the ruling party.  
  
Since the global financial crisis, central bankers have become accustomed to acting as partners to government. Exceptional times may have required unusual measures. Yet the time has now come for them to explain clearly how and when they will exit measures that have proved ineffective or which are no longer necessary, and return to “normality.”  
  
Until they do—and as long as investors are unclear about what “normality” means for central banks and how they intend to get there—markets will stay unsettled. When the exit comes, that means the adjustments will be far from smooth. Surely central bankers should be preparing markets for that, not sending mixed messages?

**Small bang**The spectrum auction that ended after five rounds of bidding on Thursday fetched the government Rs 65,789 crore. While the total spectrum on sale was 2,355 MHz across seven bands, the telecom companies picked up only 965 MHz, or just 41 per cent of it. None of them touched the most expensive 700 MHz band of spectrum. Only the 2100 MHz band, that works well for 4G services but does not carry a high price tag, was sold out. But none of this came as a surprise to either the government or the telecom industry. Companies purchased patches of spectrum they needed to fill gaps in their 4G spread. For the government, the only cause for concern is that the receipts from the auction — Rs 32,000 crore upfront to be paid by telecom companies in 2016-17 — will be less than half of what it estimated, Rs 64,000 crore, in the budget.  
  
All telecom companies attributed the poor results to high pricing of the 700 MHz band of spectrum, which was being auctioned for the first time. During an open house meeting organised by the Telecom Regulatory Authority of India (TRAI) in January this year, the 700 MHz was spoken of by companies as an “uncut diamond”. “Diamond” since it offered the best propagation properties, but “uncut” because the network devices ecosystem around this band is not as pervasive or ubiquitous as it is for some other bands. For instance, in the spectrum bands 2100-2500 MHz, technology makes it possible for networks to switch bands and offer data services quite seamlessly. So, the telecom regulator stuck to the high pricing plan of 700 MHz. Had the entire spectrum in this band been sold, it would have fetched the exchequer over Rs 4 lakh crore of the Rs 5.63 lakh crore value of the total spectrum on offer  
  
While the government did check with the regulator if putting only half the available airwaves on the block would be a practical idea, the TRAI rightly suggested there was no point in holding it back. It achieved two objectives: Telecom companies could henceforth not point to spectrum unavailability as a reason for poor quality of service or call drops, because they chose not to buy. And second, it conserved the value of 700 MHz spectrum. If it is so good a resource, how would selling it cheap to companies be a great idea? It could always fetch the best price in the next auction.

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**SCIENCE & TECHNOLOGY, ENVIRONMENT**

**Paris agreement  
  
India has ratified the Paris Agreement on climate change on the 147th birth anniversary of Mahatma Gandhi.  
India became 62nd country to ratify the agreement.  
The Paris Agreement on climate change will enter into force one month after 55 countries that account for 55% of global GHG emissions ratify the agreement.  
  
India’s climate future at stake:** The announcement by Prime Minister Narendra Modi in Kozhikode that India will now ratify the Paris Agreement on climate change as early as October 2 must surely occasion widespread surprise in India’s polity. The haste is particularly strange considering that the European Union and a number of other developed nations have not yet ratified the agreement.  
A sudden U-turn

* Less than three weeks earlier, Arvind Panagariya, NITI Aayog vice-chairman and the Prime Minister’s sherpa at the G20 summit in China, had indicated in a post-summit briefing on September 5 that India had resolutely opposed any reference in the final communiqué to a definite timeline of ratification of the agreement. The ostensible reason was that while India planned to ratify the agreement at the earliest, it also needed time because “we were not ready yet in terms of domestic actions that are required for us to ratify or at least commit to ratify within 2016
* Following such statements little has been done to inform Parliament, civil society or the people at large what these detailed considerations were that the government considered so relevant.
* The suggestions made to an international audience that fulfilling India’s commitments based on its current Intended Nationally Determined Contributions (INDCs) would require matching domestic legislation or changes in regulatory mechanisms clearly demand that the government at the Centre make clear domestically the implications for development that these commitments would have.
* It is also worth bearing in mind that developmental needs and people’s aspirations are not the sole concern or prerogative of the Central government — a substantial part of it is also borne by State governments and local self-government authorities in urban and rural areas. At the very least this would appear to call for widespread consultations and taking on board all, even if the constitutional prerogative for treaty-making rests with the Centre.  
  Need for an INDC relook
* There can be little doubt that India will have to eventually ratify the Paris Agreement. But it is not bound to convert all of the INDCs that it has submitted to the final Nationally Determined Contributions that would be written into the treaty
* This in fact provides India considerable room following Paris for a deeper look away from the pressures during the run-up to the 21st session of the Conference of the Parties (COP21). However, there is little or no evidence that the government plans any such reconsideration.
* That such a reconsideration is merited is clear from the emerging consensus among climate scientists that the 1.5°C “aspirational” target is well-nigh unachievable while even 2°C will be very difficult.
* Such goals can therefore only be achieved by turning the pressure on countries like India, since it is we (and several other smaller developing countries) who have yet to build for the future and erase our development deficits, and it is we who will need the flexibility of continued greenhouse gas to achieve these goals. Such a heavy burden is not faced by developed countries and China.
* There is time therefore for India to reconsider what part of its INDCs to retain and whether to hedge India’s future by declaring a long-term budget for India’s cumulative emissions (or any other measure serving the same end). The latter would serve to safeguard against attempts to make India, as a result of accepting these temperature goals through ratification, bear the brunt of the burden of achieving them.
* However, instead of attending to this issue, the government has been keener to link the ratification of the Paris Agreement to membership of the Nuclear Suppliers Group (NSG).
* After the Seoul meeting of the NSG, India had stated that it had hoped for membership of the NSG to take forward the process of ratifying the agreement. Linking the ratification to the difficulties of NSG membership, arising as much from our strategic nuclear obsessions as from our need for energy, points to a deplorable lack of perspective in judging the long-term priorities for the Indian people.
* India’s climate policy has been constantly hobbled by this and other strategic concerns, whatever the dispensation in New Delhi. Successive governments have all along declined to step forward with a proactive policy to protect India’s critical long-term interests. The honeymoon of the Kyoto Protocol, with emission targets only for developed nations, and seen by Delhi as the model for a long-term agreement, was obviously too good to last. Subsequently India’s policy has always been too little, too late, and at Paris, the Modi government only carried forward the accumulated legacy of the past in climate policy, without a new and sustainable approach at the critical juncture. One may even argue that at Paris the government was more sinned against than sinning.

**Paris deal put on fast-track, India ratifies pact on climate change**  
The Paris Agreement seeks to spur global action to reduce greenhouse gases from the atmosphere, fast enough to prevent catastrophic effects of climate change. It also seeks to give an impetus to actions being taken to adapt to the impacts of climate change, and raise financial and technological resources to do so.

* The Paris Agreement was initially supposed to come into operation in 2020 when the Kyoto Protocol, the existing international arrangement to deal with climate change, expires. But that deadline was later dropped — it can now come into existence immediately after the 30-day period following the minimum ratifications is over. For a few years, both Paris Agreement as well as the Kyoto Protocol would exist side by side.

**Six changes after Paris climate deal: How the new global pact could affect your life**

* In terms of its scope and impact, it is probably the most far-reaching international agreement ever.
* From here on, countries would strive to make every economic activity, anywhere in the world, compliant to climate change objectives
* . In India, as in the rest of the world, what this will lead to is change in where we live, how we travel, what we eat or wear, and even what we do in our personal and professional spaces. But while all of these may not be visible to the common people, some certainly will. So what will change, and what could?  
  1. Solar & wind energy  
  Solar photovoltaic panels and, to a lesser extent, large wind mills will become one of the most familiar sights representing the fight against climate change. India plans to install as much as 100 GW of electricity generation capacity through solar energy by 2022, of which 40 GW would be through individual rooftop systems. India had initially announced plans for setting up 60 GW of wind energy by 2022. A number of villages are already powered solely through solar or wind energy. But decentralised production and consumption of electricity, through solar, wind, biogas or small hydro initiatives, is likely to become more prevalent as efforts are made to take electricity to 200 million people still in the dark.  
  2. Home appliances  
  This shift is already underway. Bringing in greater efficiency in the way energy is produced and consumed is crucial to fulfilling one of India’s main commitments. Under the Paris Agreement, India has promised to reduce emissions intensity, or the amount of greenhouse gas emissions per unit of GDP, by 33 to 35 per cent by 2030 as compared to 2005 levels. A quarter of India’s total electricity is consumed at homes. So far, more than 3 crore households have switched over to energy efficient LED bulbs, according to government figures. More than 16.5 crore LED bulbs are in use in these houses. Electrical appliances, including air conditioners, refrigerators and television have become far more efficient.  
  3. Private & public transport  
  Electric cars are slowly marking their presence and battery-operated e-rickshaws have become popular in many cities. Now, stricter fuel efficiency norms will be put in place, with India advancing the implementation of Bharat VI pollution norms to 2020 instead of 2022. Besides, Metro tracks coming up in various cities across the country that will resolve, to a large extent, not just the problem of mass urban transport but also pollution caused by older forms of transport.  
  4. More trees  
  India has promised to create an additional carbon sink — system capable of absorbing carbon dioxide (CO2) from the atmosphere — of 2.5 to 3 billion tonnes of CO2-equivalent through forest and tree cover by 2030. That is an ambitious target. Just over 24 per cent of India’s geographical area is currently under forest and tree cover, and the stated objective is to take it to 33 per cent. However, it will be difficult to rapidly expand the forest cover, especially because more forest area will be cut for developmental or industrial requirements. As a result, planting of trees would be seen as an alternative. Besides, with close to half of India’s forests of very low quality, transforming them would lead to an increase in carbon sink. In the previous Parliament session, the government managed to get the landmark CAMPA (Compensatory Afforestation Fund Management and Planning Authority) bill passed to make up for every piece of forest destroyed for any reason. Thousands of crores of rupees are available for afforestation drives through CAMPA, or Green India Mission. The government has also spoken about planting trees along the entire stretch of highways and railways.  
  5. Smarter buildings  
  Projections show that 70 per cent of the infrastructure that India will have in 2030 is still to be built, including new cities and buildings. “Smart” and “net zero” buildings are becoming the new buzzwords, though a vast majority of new constructions are still of poor quality. As an example, the new building of the Union Environment Ministry, which came up three years ago, was constructed to be net zero, ie., the total amount of energy used on an annual basis is roughly equal to the amount of renewable energy created on the site. What will also become more common is the rating of buildings on green parameters, with incentives or penalties on electricity or water bills. Already, the Green Rating for Integrated Habitat Assessment (GRIHA), endorsed by the Ministry of New & Renewable Energy, and Leadership in Energy and Environmental Design (LEED), a third-party certification programme, which is one of the most popular green building certification programs used worldwide are fairly well established.  
  6. And finally, water  
  Climate change induces a lot of uncertainties in water availability. For a country that is already water-stressed, climate change is an additional urgent reason to reform the way in which water is managed and utilised. Some movements in this direction have already started happening. Free water is likely to be rationed in future. And water for all uses is likely to be priced. There will be no unrestricted rights over groundwater below the land one owns. And industries will be mandated to use only treated water.

**Understanding scrub typhus, the jungle fever that is stalking Himachal Pradesh**In Himachal Pradesh, the disease spreads most commonly during grass cutting operations in the orchards, and is alleged to have taken a serious turn this year due to laxity in controlling the mite.

Disease

* Scrub typhus, also known as bush typhus because the mites (Leptotrombidium deliense, commonly known as trombiculid mite) that cause it reside in vegetation predominantly comprising small shrubs, is an infectious disease with symptoms similar to any viral fever.
* However, it is not caused by a virus, but by a parasite called Orientia tsutsugamushi, which is transmitted by the bite of infected mite larvae in soil containing scrub vegetation.
* The disease is more common during the wet season when the mites lay eggs.

The symptoms  
  
The disease has an incubation period of 6-21 days, and lasts for 2-3 weeks.

* At onset there is fever, headache, bodyache, cough and gastrointestinal symptoms. Patients with a mild infection may recover without any other symptoms.
* However, roughly every second patient develops a visible black scab at the point of the bite, with a swelling of the lymph nodes.
* In about a third of cases, a delayed onset of rashes occurs 4-6 days into the disease. Severe cases typically include encephalitis and interstitial pneumonia due to vascular injury. The fatality rate is 7%.

Diagnosis

* Sores caused by the mite’s bites are usually one of the distinguishing features of the disease, crucial for clinical diagnosis. Similarities in presentation with chikungunya often confounds the diagnosis, doctors say.
* Like in dengue and chikungunya, the commonest — and cheaper — diagnostic tests involve looking for the antibodies to the parasite rather than the parasite itself in the bloodstream.
* An indirect immunoperoxidase test or a dot immunoassay or tests for detection of IgM and IgG fall under this category.
* The failsafe test is the expensive polymerase chain reaction (PCR) test.

Outbreak in Himachal

* scrub typhus has killed some 24 people in Himachal Pradesh, and affected about 855 others so far this year. Himachal Pradesh is one of the endemic areas for the disease
* it is also endemic in Pakistan, Afghanistan, Thailand, northern Australia, the Arabian peninsula and Japan.
* It is an occupational disease frequently found in people who work in the fields and are in the habit of gardening.

Himachal crisis

* In Himachal Pradesh, the disease spreads most commonly during grass cutting operations in the orchards, and is alleged to have taken a serious turn this year due to laxity in controlling the mite.

Treatment

* Antibiotics like Doxycycline or Azithromycin are commonly used to treat the disease.
* Most cases are self-limiting, and hospitalisation is not required.
* Any fluctuation in blood pressure, pulse rate or respiratory rate (hyperventilation) in a patient with undiagnosed fever, rashes, etc. though should immediately be reported to the nearest hospital.
* The outcome is often complicated by a reliance merely on clinical diagnosis, with doctors tending to prescribe the ineffective betalactam (ß-lactam) antibiotics. In such cases, the patient often reaches the hospital too late, and succumbs commonly to encephalitis and pneumonia.

**park in peril**

* Controversy over encroachment drive in Kaziranga threatens to obscure pressing ecological problems
* On paper, Kaziranga sprawls over 440 sq km. Six additional chunks were to be added to the park that would have doubled its total area. But more than 40 years after it was designated a national park, only about 45 sq km have been added.
* In this period, the park has become a conservation success. In 1970, Kaziranga had 650 rhinos, today it is home to more than 2,400 one-horned creatures. It is also home to other megaherbivores like the Asian water buffalao, elephants and the sambar deer, which compete for habitat and food. Rhinos stray into areas earmarked as extensions to the park.
* But human settlements in these areas have militated against extending it.
* Encroachment is, however, only one of Kaziranga’s problems
* A 2009 study by researchers from Delhi University found that less than 10 per cent of the park had short grass on which the rhinos feed — a large area of the park has been overtaken by weeds.
* Moreover, when the Brahmaputra floods, it chips away a bit of Kaziranga. So the park is a good 30 sq km less than what is on paper.
* There has been no study, moreover, to determine if the shrinking park can accommodate the growing number of animals.

**New species of Pika**  
A new species of Pika, a mammal belonging to the rabbit and hare family (Lagomorpha ), has been discovered in the Himalayas in Sikkim.  
Pikas are members of the rabbit family and live in the mountains or in temperate regions. The common name “pika” is used for any member of the Ochotonidae family.  
Pikas do not hibernate unlike other mammalian species inhabiting such cold climates.  
pika mammal

**T.N. tops list of endemic flowering plants**

According to a recent publication by the Botanical Survey of India (BSI)- Endemic Vascular Plants of India, almost one of every four species of flowering plants found in India is endemic to the country.

Key facts:

* Tamil Nadu accounts for the highest number of species with 410, followed by Kerala with 357 and Maharashtra with 278.
* Of the 18,259 flowering plants reported in the country, 4,303 (over 23%) are found only in India.
* When it comes to the geographical distribution of endemic plants, the Western Ghats tops the list with about 2,116 species, followed by the Eastern Himalayas with 466 species.
* Scientists of the BSI have listed at least 37 species of Black plum Syzyguim (Jamun), 10 varieties of Musa (banana), along with 274 species of orchids, which are found only in the country. Four different varieties of roses, two herbs and two climbers and 12 species of jasmines are exclusively found in India.
* Spices list includes 45 species belonging to the common black pepper family, 19 species of ginger and 13 different kinds of large cardamom. There are also 40 species of bamboos (Bambusoideae), which are endemic to India.
* Further some of these endemic species are restricted to only certain areas of the country, like Nepenthes khasiana, an insectivorous plant only found in the Khasi hills of Meghalaya. A total of 58 generea of flowering plants have been found to be endemic to India.
* As far as endemism regarding vascular plants in India is concerned, the publication reveals that of the 19, 635 vascular plants found in the country, 4,381 are endemic. This includes 4,303 angiosperms or flowering plants, 12 gymnosperms – mostly Cycads, and 66 ferns and fern allies which come under the group Pteridophytes.
* Among the Gymnosperms, non-flowering plants, at least six species of Cycas are found in the country. These plants are known to have existed from the Jurassic era and are commonly referred as living fossils as they grow very slowly.
* Around 53% of all endemic flowering plants are herbs, 20% are shrubs and 15% are trees.
* Among the most widely exploited endemic plants in country is Pterocarpus santalinus, commonly known as red sandal wood, which is found only in the southern parts of the Eastern Ghats. This plant is classified as critically endangered under International Union for Conservation of Nature (IUCN) category because of its dwindling habitat due to economic over-exploitation

**Japan’s Yoshinori Ohsumi wins Nobel for studies of cell ‘self-eating’**The Karolinska Institute honored Ohsumi for "brilliant experiments" in the 1990s on autophagy, the "self-eating" process with which cells break down and recycle some of their content.  
nobel, nobel pricem nobel price medicine, Yoshinori Ohsumi, Yoshinori Ohsumi nobel price, nobel price Yoshinori Ohsumi, Ohsumi nobel price, nobel prize, nobel prize week, nobel prizes this year, nobel prizes 2016, world news latest world newsIn this July, 2016 photo, Japanese scientist Yoshinori Ohsumi smiles at the Tokyo Institute of Technology campus in Yokohama, south of Tokyo. Ohsumi was awarded this year’s Nobel Prize in medicine on Monday, Oct. 3, for discoveries related to the degrading and recycling of cellular components. (Source: Akiko Matsushita/Kyodo News via AP)  
Japanese scientist Yoshinori Ohsumi was awarded this year’s Nobel Prize in medicine on Monday for discoveries related to the degrading and recycling of cellular components.  
The Karolinska Institute honored Ohsumi for “brilliant experiments” in the 1990s on autophagy, the “self-eating” process with which cells break down and recycle some of their content. Disrupted autophagy has been linked to several diseases including Parkinson’s, diabetes and cancer, the institute said.  
“Intense research is now ongoing to develop drugs that can target autophagy in various diseases,” Karolinska said in its citation. Ohsumi, 71, from Fukuoka, Japan, is a professor at the Tokyo Institute of Technology. In 2012, Ohsumi won the Kyoto Prize, Japan’s highest private award for global achievement.  
Nobel committee secretary Thomas Perlmann said Ohsumi seemed surprised when he was informed he had won the Nobel Prize. “The first thing he said was ‘ahhh.’ He was very, very pleased,” Perlmann said  
Nobel judges often award discoveries made decades ago, to make sure they have stood the test of time. Though autophagy has been known for more than 50 years, its fundamental significance was only recognized after Ohsumi’s “paradigm-shifting research” on yeast in the 1990s, Karolinska said.  
“Thanks to Ohsumi and others following in his footsteps, we now know that autophagy controls important physiological functions where cellular components need to be degraded and recycled,” it said. It was the 107th award in the medicine category since the first Nobel Prizes were handed out in 1905.  
Last year’s prize was shared by three scientists who developed treatments for malaria and other tropical diseases.  
The announcements continue with physics on Tuesday, chemistry on Wednesday and the Nobel Peace Prize on Friday. The economics and literature awards will be announced next week. Each prize is worth 8 million kronor ($930,000).

**Paper 3 Topic: Science and Technology- developments and their applications and effects in everyday life Achievements of Indians in science & technology; indigenization of technology and developing new technology.  
Nobel Prize in Medicine awarded to Yoshinori Ohsumi**The 2016 Nobel Prize in Physiology or Medicine has been awarded to Yoshinori Ohsumi “for his discoveries of mechanisms for autophagy.” The professor is currently at the Tokyo Institute of Technology.  
  
Ohsumi is a cell biologist. He discovered and elucidated mechanisms underlying autophagy, a fundamental process for degrading and recycling cellular components. He received the Kyoto Prize for Basic Science in 2012.  
yoshinori-ohsumi  
Yoshinori Ohsumi  
Background:  
  
The 1974 Medicine laureate, Christian de Duve, coined the term autophagy (meaning “self eating”) in 1963. This concept emerged during the 1960s, when researchers first observed that the cell could destroy its own contents by enclosing it in membranes, forming sack-like vesicles that were transported to a recycling compartment, called the lysosome, for degradation.  
What is Autophagy?  
  
Autophagy is essentially the body’s internal recycling program – scrap cells are hunted down and the useful parts are stripped out to generate energy or create new cells. It is a crucial process to prevent cancerous growths, and, by maintaining a healthy metabolism, helps protect against conditions like diabetes.  
Contributions of Yoshinori Ohsumi:  
  
Difficulties in studying the phenomenon meant that little was known until, in a series of brilliant experiments in the early 1990’s, Yoshinori Ohsumi used baker’s yeast to identify genes essential for autophagy. He then went on to elucidate the underlying mechanisms for autophagy in yeast and showed that similar sophisticated machinery is used in our cells.  
  
Ohsumi’s discoveries led to a new paradigm in our understanding of how the cell recycles its content. His discoveries opened the path to understanding the fundamental importance of autophagy in many physiological processes, such as in the adaptation to starvation or response to infection. Mutations in autophagy genes can cause disease, and the autophagic process is involved in several conditions including cancer and neurological disease.  
Sources: the hindu.

**Why the Nobel Prize winning discovery of autophagy matters**

Disruption of autophagy processes of the cell has been linked to Parkinson’s disease, type 2 diabetes.  
Nobel laureate Yoshinori Ohsumi’s work on mechanisms underlying autophagy — a fundamental process of degrading and recycling cellular components — has generated much interest in the science behind the biological process. In this article, we will aim to explain the significance of this discovery and the earlier work in this area.  
What is autophagy?  
The word autophagy originates from Greek words auto, meaning “self”, and phagein, meaning “to eat”, according to the release put up on the Nobel Prize website. The concept emerged during the 1960s, when researchers first observed that the cell could destroy its own contents by enclosing it in membranes – autophagosomes - for degradation.  
Scientists discovered during the 1950s that the cell contained specialised compartments, with enzymes that digest proteins, carbohydrates and lipids. These compartments also helped with degradation of cellular constituents. During the 1970s and 1980s, researchers explained the working of a system used to degrade proteins.  
Experiments on autophagy  
Professor Ohsumi started working on protein degradation in the vacuole (the fluid-filled pocket found in the cell) in 1988. At that time scientists used yeast cells as a model for human cells. But he faced a major challenge; yeast cells are small and their inner structures are not easily distinguished under the microscope and thus he was uncertain whether autophagy even existed in this organism.  
But he reasoned that if he could disrupt the degradation process in the vacuole while the process of autophagy was active, then autophagosomes should accumulate within the vacuole and become visible under the microscope. He cultured mutated yeast lacking vacuolar degradation enzymes and simultaneously stimulated autophagy by starving the cells. Within hours, the vacuoles were filled with small vesicles that had not been degraded. His experiment proved that authophagy existed in yeast cells. He had also figured out the method to identify and characterise key genes involved in this process. This was a major breakthrough.  
Within a year of his discovery of autophagy in yeast, Professor Ohsumi had identified the first genes essential for autophagy. He studied thousands of yeast mutants and identified 15 genes that are essential for autophagy. Subsequently, he characterised the proteins encoded by these genes according to their function. The results showed that autophagy is controlled by a cascade of proteins and protein complexes, each regulating a distinct stage of autophagosome initiation and formation.  
Professor Ohsumi studied the function of the proteins encoded by key autophagy genes. He outlined how stress signals initiated autophagy and the mechanism by which proteins and protein complexes promoted distinct stages of autophagosome formation.  
Physiological functions  
Autophagy can rapidly provide fuel for energy and building blocks for renewal of cellular components, and is, therefore, essential for the cellular response to starvation and other types of stress. After infection, autophagy can eliminate invading intracellular bacteria and viruses. Autophagy contributes to embryo development and cell differentiation. Cells also use autophagy to eliminate damaged proteins and organelles, a quality control mechanism that is critical for counteracting the negative consequences of aging.  
Disruption of the autophagy processes of the cell has been linked to Parkinson’s disease, type 2 diabetes and other disorders that appear in the elderly. Mutations in autophagy genes can cause genetic disease. Disturbances in the autophagic machinery have also been linked to cancer. Efforts are on to develop drugs that can target autophagy in various diseases.  
If not for ProfessorOhsumi’s research in the 1990s, the world would not have known the fundamental importance of autophagy in physiology and medicine.

**The lure of the exotic and esoteric**

If “wonderful discoveries happening in biology” had acted as a trigger for Nobel Laureate Venkatraman Ramakrishnan to switch from physics to chemistry, the nearly matured and well-established field of chemistry failed to enthuse [Yoshinori Ohsumi](http://www.thehindu.com/sci-tech/science/nobel-prize-in-medicine-awarded-to-yoshinori-ohsumi/article9180014.ece), and he shifted to biology. Autophagy — a fundamental process for degrading and recycling cellular components — was known long before he ventured into the field, but it was his paradigm-shifting research that revealed the importance of this fundamental process that comes into play every other minute. His seminal work helped reveal that vacuoles in yeast and lysosomes in human cells are not just garbage bins but recyclers and fuel producers. Right from the stage of embryo development to countering the negative effects of ageing, autophagy plays an important role. As in the case of many Laureates, Dr. Ohsumi’s initial years were more than frustrating, but he prevailed. His approach to science is an antithesis to what is generally seen in today’s young researchers, and that precisely is what helped him break new ground and bag the Nobel Prize this year — only the third Laureate since 2010 to not share the Prize for Physiology or Medicine with others.

But lysosomes and other cellular bodies would be severely impacted if molecular machines in our body failed to work synchronously to carry materials around in a cell and for several other functions. Though not as elegant as the molecular machines at work inside us, the work done by Jean-Pierre Sauvage, J. Fraser Stoddart and Bernard L. Feringa, the winners of the [Nobel Prize in Chemistry](http://www.thehindu.com/sci-tech/science/chemistry-nobel-goes-to-molecular-machine-developers/article9188424.ece), has set the ball rolling in the endeavour to realise Nobel Laureate Richard Feynman’s dream more than 50 years ago of building very small machines. Though very primitive at this point in time, science will see one of the biggest revolutions when the cogs and cranks of their work are finally put together to build machines on a nanoscale; nanomachines will find applications in diverse fields, from medicine to electronics. Much like the nanomachines of tomorrow, David J. Thouless, F. Duncan M. Haldane and J. Michael Kosterlitz’s theoretical explanations for exotic states of materials by using topological concepts will give birth to a completely different class of products. [This year’s Nobel-winning physicists](http://www.thehindu.com/sci-tech/science/physics-nobel-awarded-for-discoveries-on-exotic-matter/article9184032.ece), they predicted the exotic behaviour that other scientists later found at the surface of materials and inside very thin layers, such as superconductivity and magnetism in extremely thin materials. Physicists are now looking beyond the ordinary to find new and exotic phases of matter that change in a stepwise fashion.

**Paper 3 Topic: Conservation, environmental pollution and degradation, environmental impact assessment.  
Delhi tops most polluted megacity list**According to WHO, Delhi’s air is the worst among world megacities.  
  
Key facts:  
  
The data show that fine-particulate-matter (PM2.5) levels were almost four times above daily safe levels, on average, for the seven-day period from September 22 to 28, 2016. For long-term exposure, these 24-hour levels are nearly 11 times above the WHO health standards.  
Over the monsoons, Delhi’s air was relatively cleaner because the rain and wind diminished the impact of pollutants. But with the season changing, air-quality also diminished, meaning prolonged exposure affects healthy people and “seriously impacts” those with existing disease.  
fine-particulate-matter  
  
Delhi recorded a PM10 level of 229 µg/m³, followed by Cairo with 179 µg/m³ and Dhaka with 158 µg/m³ – the top three megacities with the most polluted air globally. Beijing and Shanghai were sixth and seventh on that list.  
Delhi was the only megacity to record a PM10 level above 200 µg/m³, exceeding the WHO air quality standard of 20 µg/m³ by more than 900%. Beijing and Shanghai reported ambient air pollution levels of 108 and 84 µg/m³ respectively.  
Within India, the smaller cities of Gwalior and Allahabad measured the worst levels of ambient air pollution at PM2.5 levels of 176 µg/m³ and 170 µg/m³ respectively. A significant portion of northern India falls in a zone with “critical” air pollution-reporting PM2.5 levels of over 70 µg/m³ in the WHO’s mapping of air pollution and population.    
What’s the concern?  
  
In 2012, with one million deaths, China reported the highest toll from PM2.5 and PM10 pollution. At the time, India followed, reporting 621,138 deaths, nearly 10% of the global toll (6.5 million deaths) associated with outdoor and indoor air pollution.  
  
However, between 2011 and 2015, in a comparison of megacities with population above 14 million, Delhi’s ambient air-pollution levels were worse than Beijing and Shanghai.  
  
WHO guidelines:  
  
The WHO guideline for annual mean levels for PM10 is 20 µg/m³ and for PM2.5 is 10 µg/m³. For 24 hours, the levels should not exceed 50 µg/m³ (for PM10) and 25 µg/m³ (for PM2.5).  
  
Why exposure to PM 10 is not good?  
  
It is because most air-pollution deaths are caused by fine, invisible particles, called PM2.5, about 30 times finer than a human hair. These pollutants, if inhaled deep into the lungs, can cause heart attacks, strokes, lung cancer and respiratory diseases, and are known to pose the greatest risk to human beings. PM10, or coarse particulate matter with diameter between 2.5 and 10 micrometers, are primarily made up of dirt and dust from farming, factories and roads, and caused due to the crushing of rocks and soil.  
  
Sources: et.  
  
**DBT in kerosene**  
Jharkhand has become the first state in the country to implement Direct Benefit Transfer (DBT) in Kerosene in four identified districts namely, Chatra, Hazaribagh, Khunti and Jantara from 1st October, 2016.  
Under the DBTK Scheme, PDS kerosene is being sold at non-subsidised price, and, subsidy, as admissible, is being transferred to consumers directly into their bank accounts.  
This initiative of the governments is aimed at rationalising subsidy, based on the approach to cut subsidy leakages but not subsidy per se

**Not simply a vision thing**

The act of developing a technology is as much work inside the laboratory as it is of engaging with the state and society on various concerns and questions  
Monsanto recently decided that it would stop the release of new genetically modified (GM) cotton technology because of “uncertainty in the business and regulatory environment”. At the same time, it was reported that GM mustard has moved closer to obtaining clearance for commercial cultivation in India following a key committee’s favourable assessment on issues of soil suitability and risks to health and ecology.

The issues involved are complex and contested, and the challenges and contradictions may be evident to even the most casual of observers. Bt brinjal itself may have faded away from public discourse but the debacle over its introduction is not something that will be forgotten in a hurry. The contestations over Bt cotton continue to be alive in scientific research, in experiences on the field, and in policy debates. The seed industry has, in fact, split down the middle over a reorientation of the regulatory and policy frameworks related to Bt cotton. And yet, for a certain prominent section of the science and technology (S&T) establishment of the country, the promise of GM mustard trumps all scepticism.

Contestations  
The conundrum here is not so much about the technology itself as it is about the promise that imbues the technology and which holds the present and the future together. Building promises is very similar to building facts, notes Cynthia Selin who studies the intersection of science, technology and society. It is the promise and vision of the future that then becomes key in generating a constellation that provides social and political legitimacy on the one hand, and much-needed financial resources on the other. Bt cotton, Bt brinjal and many technologies of the future exist through the expectations they generate and mobilise about the future. The act of developing a technology, therefore, is as much work inside the laboratory as it should be of engaging with the state and society and with their various concerns and questions. This will not be possible if the public is seen as ignorant or ill-informed, and the activist reactionary or an agent of vested interests. The contestation is, in fact, over the vision of S&T, of society and, for that matter, of the future itself.

In the case of GM mustard, work was done at Delhi University using public money provided by the government. And yet it needed the Central Information Commissioner to say that biosafety data around GM organisms should be available in the public domain. There are some key questions here. What explains, for instance, this deficit of trust in the public and in democratic mechanisms set up by the very institutions that provide the resources and the legitimacy for these new technologies? Is it an anxiety about failure of the technologist or of the technology itself? Or is it about the stakes involved in the socio-technical-economic system that has been mobilised to create the legitimacy in the first place? Does it say something about the potential failure of an imaginary technology that is based exclusively on the promise of the future? Can the narrative be one of hope and promise alone with no space for doubt or the possibility of any failure at all?

Technology Vision 2035  
This indeed is the premise one sees embedded in India’s Technology Vision 2035 (TV 2035), a vision produced by the Technology Information, Forecasting and Assessment Council (TIFAC), an autonomous organisation under the Department of Science and Technology. Released earlier this year by Prime Minister Narendra Modi, TV 2035 charts out trajectories for society through various technologies that will help make India a ‘developed’ country by 2035. The vision is both an account of a future and a route to that future where technology delivers, provides and secures. Risk and vulnerabilities that are inherent to technology and therefore to our increasingly ‘technological cultures’, as Professor Wiebe Bijker, sociologist of science and technology, calls them, are part of the narrative in only a very marginal manner. There is little, if any, doubt about the capacity of technology and the different technologies to deliver the goods. TV 2035 sees people opposed to certain technologies like nuclear and big dams as a barrier to their dreams. These then need to be addressed through better governance and not better technological design because “bottlenecks lie in policy and not technology”.

The past and the present, we know, are full of various dilemmas, challenges, even failures of technological promises and yet, a substantive engagement with the ethical, legal and social (ESLA) issues of research, development and deployment of technology is conspicuous by its virtual absence.  
When failure and risk are integral parts of the technological enterprise, why is it that technological visions like TV 2035 have such little space for including and discussing them? It may not be a conscious choice, but it is not an innocent one either. The particular question here is not whether GM mustard is acceptable, which is a rather different debate. The point is to note that the promise and the promissory visible frontstage in advocating a GM mustard is complemented by a vision backstage that is unwilling or perhaps unable to look at anything but that promise. The ideal of the democratic in scientific and technological choices, while desirable, is certainly not an easy one to realise because the messy issues of the ethical, legal and social have to be dealt with both frontstage and backstage.

Political and democratic promise  
An illustration of this is visible in a situation where the technological only appears marginal at first glance. On a visit to Kashmir, a conciliatory Home Minister Rajnath Singh offered to engage with anyone who was interested in finding a solution to the crisis there. “I will be staying at the Nehru Guest House. Those who believe in Kashmiriyat, Insaniyat and Jamhooriyat are welcome,” he tweeted in an effort to reach out to all. It was as much an invocation of the political and the democratic promise as it was of the technological promise of modern communications. The irony only came forth when he was asked how this message of the Home Minister would reach the people when the government itself had blocked Internet services.  
What more can one say of the inextricable intertwining of the political and the technological with the social, legal and ethical? The technological has promise, no doubt, but it is not untethered to chart territories of its own making

**.Blue Origin successfully tests escape system, lands rocket**This was the first inflight test of the emergency escape system, designed to save lives if something goes wrong with the rocket during liftoff.

Rocket company Blue Origin has pulled off a double success. The aerospace startup led by Amazon’s Jeff Bezos tested the escape system of its space capsule on Wednesday in remote west Texas. Forty-four seconds into the flight, the capsule popped off like a champagne cork, propelled by an escape motor mounted underneath.  
Not only did the capsule land safely under parachutes following liftoff, the rocket managed to fly back and land upright. This was the first inflight test of the emergency escape system, designed to save lives if something goes wrong with the rocket during liftoff.

Blue Origin’s launch commentators called it an “epic flight” from beginning to end. Bezos had warned in advance that the booster rocket probably would end up crashing back to Earth, after being jolted by the 70,000 pounds of force exerted by the escape system.  
Instead, the booster made what looked to be a fine vertical touchdown seven minutes after liftoff, just a couple miles from its launch pad.  
“Wow. There it is. Bingo, New Shepard. Look at her,” launch commentator Ariane Cornell exclaimed once the booster landed.  
“What an extraordinary test and a tremendous final test for both craft.”  
The rocket and capsule system are intended for suborbital flight and are called New Shepard after the first American in space, Alan Shepard.

Bezos hopes to start launching tourists and other paying customers in the years ahead.  
Blue Origin is aiming for reusability to lower launch costs. After the capsule popped off, the rocket kept going up, reaching more than 240,000 feet high, before descending to the desert floor.  
This rocket has flown five times and is now bound for a museum along with the capsule. The capsule has also had flown before, including a launch pad escape test, minus a rocket, in 2012.  
Based in Kent, Washington, Blue Origin has taken over a launch pad at Cape Canaveral Air Force Station for future orbital flights.  
That newly unveiled system, still in development, is called New Glenn for the first American to orbit the Earth, John Glenn.  
While another private space company, SpaceX, has landed some of its first-stage boosters at Cape Canaveral or just offshore on a floating platform, all of them used in orbital missions, it has yet to refly any of these recovered rockets.  
It had hoped to do so by year’s end, but an explosion on the launch pad during testing on September 1 has everything on hold.  
Both the SpaceX Falcon rocket and its payload, an Israeli satellite, were destroyed.

**Nobel Physics Prize 2016: Of flatlands and threads**

laureates' work rests in a meeting point of topology, the study of geometric properties, and phase transitions of matter.  
This year, the Nobel Prize in Physics has been awarded to David J. Thouless, F. Duncan M. Haldane and J. Michael Kosterlitz for “theoretical discoveries of topological phase transitions and topological phases of matter.” One half of the prize goes to Prof. Thouless and the rest to Prof. Haldane and Prof. Kosterlitz.  
While Prof. Kosterlitz and Prof. Thouless studied phase transitions in two-dimensional (flatland-like) systems, Mr. Haldane studied thread-like one-dimensional matter models. From explaining Quantum Hall Effect to new topological materials, their work has thrown open huge areas in condensed matter physics.  
Prof. Haldane, when contacted by the Nobel committee after the prizes were announced, said that when he worked on the problem in the late 1980s, it “seemed abstract and was of mathematical and scientific interest. I did not think it would ever find practical applications...”  
Speaking of how he came up with the idea, he said of big discoveries, “You never set out to discover them. You stumble upon it and then realise you have discovered something. It takes a while, and when you do, you wonder why someone else did not discover it…”  
Topology, the study of geometric properties of the medium in question, is the unifying theme of the work done by the three scientists. This sounds, and is, very mathematical; the scientists’ special achievement is in taking deep mathematical concepts and using them to prove some very fundamental aspects of physics.  
Meeting point of topology and phase transitions  
Their work rests in a meeting point of topology and phase transitions. One can observe different phases of materials; for example water, which exists as solid, liquid or gas. The material can undergo transitions from one phase to another, just as water evaporates into vapour. When you cool some substances to very low temperatures, you can encounter exotic phases. Such phases were studied by these scientists, who characterised the phases using a sophisticated geometrical concept — topology. To see what topology entails, compare a ball and a cup. These are different topologically because all closed loops placed on the surface of the ball can be shrunk to a point, while the same cannot be said of the cup, which has a “handle”.  
Senior condensed matter physicist G. Baskaran of the Institute of Mathematical Sciences, Chennai says, “Kosterlitz and Thouless’ work on planar X-Y model came into condensed matter physics in a big way. They described non-trivial effects, which could not be reproduced simply. We knew it was a paper that was going to make a change in physics.” Prof. Baskaran describes how the influence of their work is reflected even in high-energy physics and string theory.  
Prof. Haldane, according to Prof. Baskaran, “worked-in topology in profound ways”. Prof. Baskaran refers to developing an understanding of Quantum Hall Effect. The influence of Prof. Haldane’s work stretches on: From forming the basis of topological field theories to the Haldane-Sastry model, to topological insulators and conceptualising the “Haldane gap,” a critical parameter in the study of chains of antiferromagnetic atoms.  
Indians have developed this field further and made important contributions. For example, J.K. Jain’s work on composite fermions is famous. The work on topological insulators by C.L. Kane et al is another significant work which take up where they leave off. As Prof. Baskaran puts it, “This prize clears the way for other Nobel prizes.”

**Chemistry Nobel 2016 goes to builders of world's smallest machines**Royal Swedish Academy of Sciences says molecular machines "will most likely be used in the development of things such as new materials, sensors and energy storage systems".  
The Nobel Prize in Chemistry for 2016 has been awarded to Jean-Pierre Sauvage, Sir J. Fraser Stoddart and Bernard L. Feringa for developing molecular machine.  
Announcing the Prize on Wednesday in Stockholm, a statement from the Royal Swedish Academy of Sciences said,"The development of computing demonstrates how the miniaturisation of technology can lead to a revolution. The 2016 Nobel laureates in Chemistry have miniaturised machines and taken chemistry to a new dimension."Academy says molecular machines “will most likely be used in the development of things such as new materials, sensors and energy storage systems”.  
"They have developed molecules with controllable movements, which can perform a task when energy is added... Molecular machines will most likely be used in the development of things such as new materials, sensors and energy storage systems," it said.  
**Physics Nobel shared by three, one half by one and the other by two**They get the award "for theoretical discoveries of topological phase transitions and topological phases of matter."  
The Nobel Prize in Physics for 2016 has been divided, one half awarded to David J. Thouless, the other half jointly to F. Duncan M. Haldane and J. Michael Kosterlitz "for theoretical discoveries of topological phase transitions and topological phases of matter."  
Announcing the Prize on Tuesday in Stockholm, a statement by the Royal Swedish Academy of Sciences said that “This year’s Laureates opened the door on an unknown world where matter can assume strange states. They have used advanced mathematical methods to study unusual phases, or states, of matter, such as superconductors, superfluids or thin magnetic films. Thanks to their pioneering work, the hunt is now on for new and exotic phases of matter.”  
Last year, Physics Nobel was awarded to Takaaki Kajita and Arthur B. MacDonald for their work with neutrinos.

**Making cities disease-free**

Chandigarh and Surat, by segregating and storing waste at source and recycling and composting, show other cities the way forward  
With even the national capital not spared, Indian cities are plagued by a plethora of communicable diseases of late: dengue, bird flu, typhoid, chikungunya and swine flu. This is not a new trend.  
In September 1994, pneumonic plague was reported in parts of Surat, Gujarat, and hospitals were overcrowded with patients. Suspected cases totalled 1,061 between September 20 and 25, leading to mass panic. Around 25 per cent of the population is said to have fled the city, carrying the disease with them to Delhi, Mumbai, Nashik, and Kolkata. Surat’s diamond processing localities, a high-risk hotspot, were soon uninhabited. Air India flights landing in London were termed as “plague planes”. With its open sewers and slums and soaking garbage due to the monsoons, Surat was described as a “medieval horror show”.  
More recently, in May 2016, there were reports of bird flu in a poultry farm in Humnabad, Bidar district of Karnataka. The State’s animal husbandry department swung into action, asking for the culling of nearly 1.5 lakh birds in the farm. While the outbreak has now subsided, such incidents remain surprisingly frequent and worrying. Disease outbreak remains common in India, with debilitating consequences.  
Management of waste  
Sanitation was never a major concern for pre-independent India. It has remained that way. In 1907, when plague led to the death of 1.3 million people, the colonial government remained focussed on preventing cholera epidemics, ensuring military sanitation and preventing the outbreak from infecting the bureaucracy. Instead of funding an expansion of municipality-based sanitation through sewers, the government chose to intensify manual scavenging. Any collection inefficiencies were blamed on the poverty-ridden scavengers, a bias that remains ingrained in our municipal institutions. Post-Independence, India’s cities have grown haphazardly, mostly in unsanitary conditions, with outbreaks tempered by the widespread use of antibiotics and insecticides. Mutual collaboration between the urban middle class and the hinterland has been disincentivised by institutional apathy and unequal economic progress. During epidemic outbreaks, the sick and the underprivileged are left with no recourse to satisfactory health-care systems.  
Today, about 90 per cent of solid waste is directly dumped into landfills. There remains little, if any, monitoring of heavy metal concentration in municipal solid waste. Consider a seemingly well-planned city, Chandigarh. It generates an average of 370 tonnes of solid waste on a daily basis. Just 7-8 per cent of its solid waste management budget is allocated for garbage collection. Given these figures, its collection efficiency varies (70 per cent from registered households, only 20 per cent from slums and surrounding villages). For each of its 56 sectors, 10-15 sweepers are assigned, many of whom suffer from parasitic diseases like diarrhoea, jaundice and trachoma. These workers remain unaware of the health hazards of their occupation, with limited mechanical equipment to help minimise their direct contact with solid waste.  
We conduct limited, if any, separation at source despite a high proportion of our household waste being biodegradable. We should seek to encourage composting, which would help reduce landfill burden while increasing collection efficiency. This can be further encouraged by setting up biomethanation plants in all Tier 2 and 3 cities to process vegetable and mixed waste. Most of our collection of solid waste takes place in an ad hoc manner. Routes are decided mostly by local sweepers and drivers and there is inadequate scheduling of collection of waste from different sectors across urban areas. Waste is mostly dumped in an unsanitary and uncontrolled manner. It is then covered with soil and buried by machinery.  
Public health leaders  
Cities like Chandigarh and Surat can show us the way. Chandigarh is increasingly focussing on developing an integrated municipal solid waste management process by seeking to conduct segregation and storage of waste at source while promoting recycling, composting, and generation of electricity from municipal waste.  
Surat has now turned into a public health leader by overhauling its trash collection and street cleaning processes and enforcing proper hygiene in restaurants. It has overhauled its slums, offering their residents paved streets and toilets. It regularly conducts disease surveillance through 489 surveillance workers, testing more than 2.3 million malaria breeding spots in 2014 while offering active diagnosis. The municipal corporation has built up a large network of 41 urban health centres, supplemented by mobile health clinics, over 500 private hospitals, and 1,300 teaching units. Garbage collection has been given a strict timetable, with each sweeper allocated a specific area. Dustbins have been installed and litterers are heavily penalised. The results are clear: cases of vector-borne diseases are rapidly declining. Surat now retains pride over its cleanliness. Sri Lanka also offers a remarkable example: it was recently declared free of malaria.  
It’s not hard to build an effective waste management system. Simple things matter. A study in Bhopal highlighted that limited collection labour, badly designed community bins in poorly thought through locations, ill-maintained collection vehicles, and a general lack of waste treatment and disposal facilities led to poor waste management. Systematic thinking is still lacking. We retain limited public participation, even more limiting institutional funding, and a feckless policy and legal framework. Political will combined with active surveillance and institutional support can turn our cities around. Changing our cities from disease-prone filthy conurbations to smarter cities is a challenge that must be met through vigilance and better execution.

**Allay the fear**

Despite scientific evidence to the contrary, mobile towers have evoked safety concerns. SC query could help clear the air.

On Monday, the Supreme Court sought answers from the government on a range of questions pertaining to mobile towers. A bench comprising Chief Justice T.S. Thakur and Justices C. Nagappan and A.M. Khanwilkar asked the department of telecommunications (DoT) if it had set standards to deal with the radiation from them and wanted to know if there were harmful effects. Mobile towers have become controversial in the past decade and answers to the apex court’s queries could clear the air.  
The apex court’s queries were in response to a petition filed by a Noida resident, alleging that the adverse effects of mobile towers range “from headaches, sleep disturbances, dizziness, other neurophysical disturbances to life-threatening brain tumors”. “Radiation from cell phones and towers has also been linked to sweeping decline of honey bees, sparrows, and other birds and animals,” the petition said. These health and environment hazards were, in fact, recognised by the ministry of environment and forests in 2011. That year, a committee of the ministry suggested that electromagnetic radiation (EMR) by mobile towers be treated as a pollutant. In 2012, DoT framed guidelines for issuing clearances for these towers. They reduced the permissible radiation limits for towers to 10 times lower than those recommended by the International Commission on Non-Ionising Radiation Protection (more than 50 countries follow this standard). The stringent norms were criticised by the telecom industry and the WHO. But both the UPA government and the current NDA government have been steadfast in erring on the side of caution. Both governments have, however, paid short shrift to another recommendation of the MoEF committee that suggested treating radiation from mobile towers as pollutants: The guidelines for setting up mobile towers do not bar the installation of towers near hospitals, old age homes and schools. Such proscription is international practice.  
Meanwhile, citizen’s groups, resident welfare associations and individual citizens have petitioned the government and kept up the pressure, even as scientists have reiterated the safety of these towers. In 2013, a group of scientists from IITs of Mumbai, Hyderabad, Delhi, Madras, and Kanpur and the IISC in Bengaluru wrote to the government saying that radiation from cellphone towers is too little to cause harm. In July, the DoT organised an awareness campaign in Hyderabad to allay people’s misgivings. Such initiatives have, however, been very few. One hopes the apex court’s queries will goad the government — and the scientific community — into allaying people’s fears.

**Paper 3 Topic: Infrastructure: Energy, Ports, Roads, Airports, Railways etc.  
Indian Bridge Management System**  
The Indian Bridge Management System (IBMS) has been launched.  
  
What is it?  
  
IBMS is being developed to create an inventory of all bridges in the country and rate their structural condition so that timely repair and rehabilitation work can be carried out based on the criticality of the structure. Indian Bridge Management System (IBMS)  
  
IBMS is the largest platform in the world owned by a single owner, with database that could exceed 1,50,000 bridge structures. So far 1,15,000 bridges have been inventorized, of which 85,000 are culverts and the rest are bridges.  
  
Why was it necessary?  
  
Lack of any data base on bridges in the country has led to a situation where there is no clear idea about the exact number and location of bridges. Hence, it has become difficult to maintain bridges in proper working condition. Poor condition of bridges hampers efficient transport and has also led to accidents and loss of lives on several occasions.  
  
How it operates?  
  
During inventory creation each bridge is assigned a unique identification number or National Identity Number based on the state, RTO zone and whether it is situated on an National Highway, State Highway or is a district road.  
Then the precise location of the bridge in terms of latitude-longitude is collected through GPS and based on this, the bridge is assigned a Bridge Location Number.  
Thereafter, engineering characteristics like the design, materials, type of bridge, its age, loading, traffic lane, length, width of carriage way etc are collected and are used to assign a Bridge Classification Number to the structure.  
These are then used to do a structural rating of the structure on a scale of 0 to 9, and each bridge is assigned a Structural Rating Number.  
The rating is done for each component of the structure like integral and non integral deck, superstructure, substructure, bank and channel, structural evaluation, deck geometry, vertical clearance, waterway efficiency etc.  
In addition to the structural rating, the bridges are also being assigned Socio-Economic Bridge Rating Number which will decide the importance of the structure in relation to its contribution to daily socio-economic activity of the area in its vicinity.  
Based on this inventory IBMS will analyse data and identify bridges that need attention. Further inspection will be carried out wherever required to improve the operational availability of the structure, enhance its life and prioritize repair and rehabilitation work. The data will help to decide which bridge needs critical attention, or which needs to be rebuilt.  
Sources: pib.  
**Paper 3 Topic: Science and Technology- developments and their applications and effects in everyday life Achievements of Indians in science & technology; indigenization of technology and developing new technology.  
  
Physics Nobel shared by three, one half by one and the other by two**Three physicists have been awarded the Nobel Prize in Physics for rewriting our understanding of exotic quantum states on the surfaces of materials. Their work explains the behavior of superconductors and superfluids by connecting these systems to topology, the mathematical study of spatial properties including surfaces.2016-nobel-prize-in-physics  
  
Half of the prize goes to David J. Thouless, a physicist at the University of Washington in Seattle, while the other half will be split between J. Michael Kosterlitz, a physicist at Brown University, and F. Duncan M. Haldane, a physicist at Princeton University.  
  
  
What is topology?  
  
Topology is a branch of math that studies what properties are preserved when objects are stretched, twisted, or deformed.Sources: the hindu.

**Paper-3 Topic: Science and Technology- developments and their applications and effects in everyday life Achievements of Indians in science & technology; indigenization of technology and developing new technology.  
Maharashtra to be on the crest of scienc**e  
Maharashtra State Cabinet has decided to hand over 40.68 hectare government land to the Atomic Energy Department to build the Laser Interferometer Gravitational Wave Observatory Project (LIGO India Project) at Dudhala village in Hingoli district.  
  
Key facts:  
  
In April this year, India and United States had signed an MoU to set up the LIGO Observatory that recently proved the existence of gravitational waves envisaged by Albert Einstein nearly a century ago.  
With this project, India will join an elite league of countries that support research on gravitational waves. Besides the U.S, U.K, Italy, Germany and Japan have ongoing research in the area.  
The two current LIGO Observatories are located at Hanford, Washington, and Livingston, Louisiana, and are operated by Caltech and MIT.  
The LIGO project is run with the collaboration of 90 universities and research institutions. Thirty people of Indian origin are part of the LIGO project.  
Background:  
  
The proposed LIGO-India project aims to move one Advanced LIGO detector from Hanford to India. LIGO-India project is envisaged as an international collaboration between the LIGO Laboratory and three lead institutions in the IndIGO consortium: Institute of Plasma Research (IPR) Gandhinagar, Inter University Centre for Astronomy and Astrophysics (IUCAA), Pune and Raja Ramanna Centre for Advanced Technology (RRCAT), Indore.  
  
LIGO lab would provide the complete design and all the key detector components. Indian scientists would provide the infrastructure to install the detector at a suitable site in India and would be responsible for commissioning it.  
The proposed observatory would be operated jointly by IndIGO and the LIGO-Lab and would form a single network along with the LIGO detectors in USA and Virgo in Italy.  
Sources: the hindu.

**World’s first three-parent baby born**

The world’s first three-parent baby has been born in Mexico with the help a controversial new fertility technique that incorporates DNA from three people, and is reported to be healthy at five months of age.

The ‘three-parent’ technique allows parents with rare genetic mutations to have healthy babies.

The boy’s mother carries genes for Leigh syndrome, a fatal disorder that affects the brain, muscles and nerves of developing infants. Genes for the disease reside in DNA in the mitochondria, which provide energy for our cells.

The parents of the baby, a Jordanian couple, had been trying to start a family for almost 20 years.

Ten years after they married, the woman became pregnant, but it ended in the first of four miscarriages.

In 2005, the couple gave birth to a baby girl. Their daughter was born with Leigh syndrome, and died aged six.

The couple’s second child had the same disorder, and lived for 8 months, the ‘New Scientist’ reported.

The couple sought out the help of John Zhang and his team at the New Hope Fertility Centre in New York City.

Zhang used an approach called spindle nuclear transfer. He removed the nucleus from one of the mother’s eggs and inserted it into a donor egg that had its own nucleus removed.

The resulting egg - with nuclear DNA from the mother and mitochondrial DNA from a donor - was then fertilised with the father’s sperm.

Zhang’s team used this approach to create five embryos, only one of which developed normally. This embryo was implanted in the mother and the child was born nine months later on April 6, this year.

When researchers tested the boy’s mitochondria, they found that less than one per cent carry the mutation.

This may be too low to cause any problems; generally it is thought to take around 18 per cent of mitochondria to be affected before problems start, researchers said.

The team will describe the findings at the American Society for Reproductive Medicine’s Scientific Congress in the US in October.

**The fight against leprosy**  
India must eradicate both the disease and the stigma it evokes  
The mere mention of “leprosy” has evoked fear and dread among people across the world for centuries. The adversities suffered by leprosy patients are multi-faceted, ranging from medical, social and psychological to economic and legal. Caused by a slow-growing bacteria called Mycobacterium leprae (M. leprae), leprosy primarily affects patients’ skin and peripheral nerves, leading to disfigurement and nerve damage.  
  
Indian research contributed to the development of Multi-Drug Therapy or MDT, now recommended by WHO, which led to the shortening of treatment and higher cure rates. Challenges to complete elimination include lack of a simple and accurate diagnostic test, long duration of treatment and most importantly, the social stigma which prevents patients from seeking care.  
  
Though the incidence of this disease has decreased substantially, the fight against leprosy is still far from over. In India, though we achieved leprosy elimination (<1 new leprosy case per 10,000 population) in 2005, 60 per cent of the world’s leprosy patients are in our country. Further, a sample survey for leprosy conducted by the Indian Council of Medical Research (ICMR) in 2008-2011 estimated that there may be 2,50,000 new cases every year.  
  
This has led us to strengthen and modify the National Leprosy Eradication Programme (NLEP), so that it focuses on both prevention and cure, especially in endemic regions. A Leprosy Case Detection Campaign was launched in March 2016, involving house-to-house screening and referral of patients for diagnosis. Till date, 68 million people have been screened in 50 districts and seven states, resulting in 65,000 suspected cases detected and over 4,000 confirmed ones. ASHAs or Accredited Social Health Activists under the National Health Mission have been involved in the leprosy programme for the past seven years, helping in detecting cases and completing treatment.  
  
While the physical effects of leprosy cause pain, disfigurement and loss of function, the social stigma accompanying leprosy results in isolation, depression and loss of livelihoods. In the past, many patients would be admitted to asylums and sanatoriums, forced to leave their homes to live in designated colonies. Fighting such discrimination, Mahatma Gandhi famously said the ultimate measure of success would be the day the disease would be eradicated.  
  
  
Our fight against leprosy has to be measured against sensitivity displayed by society. Removal of the stigma is vital. Only then will those affected come forward for treatment and care. We cannot deny their dignity and privileges. More than laws, our attitude to leprosy has to change, doing away with discrimination. That is half the battle won.  
  
To successfully arrest and eradicate leprosy from our nation, it is necessary that we devise a clear strategy. The modified strategy will ensure that we approach individuals on a door-to-door and person-to-person basis to complete detection and screening. To certify that no one is left out, the government will cover 163 endemic districts and revisit ones surveyed in preceding stages. Alongside, we plan to increase the number of active case detection days and initiate a drive to encourage patients to approach nodal centres for detection, with or without financial incentives. We will also build champions for the disease who will spread awareness and prevent stigma.  
  
While charting our way ahead, we will also consider new inputs to be integrated into our programme. Though slit skin smear is considered the simplest diagnostic technique, newer molecular-based methods have been developed by the ICMR and are being introduced in the programme. On-ground infrastructure will also be improved and care-givers will be trained specifically. A follow-up system will be established to monitor deformities after treatment completion.  
  
The government stands committed to these actions. As a first step, we will be launching a novel vaccine, developed in India, on a pilot basis in five districts in Bihar and Gujarat. If it yields positive results, the leprosy vaccine programme will be extended to other high-prevalence districts. With concerted efforts from health and community organisations, members of civil society and most importantly, with a holistic approach, I am certain our country will be able to defeat leprosy.